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THE QUESTION OF THE WOMEN'S COLLEGES

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I

STEP by step with the recognition of the place of woman in the community has grown the need for educating her for that place. During the last two generations her right to the opportunities of higher education has been admitted, and institutions have sprung up to provide them. These institutions have now reached a crisis in their history which challenges the attention of anyone interested in the progress of our national culture.

There are seven such colleges alike enough in history, in development, and in present interests to be pondered on and discussed by their friends as a unit, and a composite picture of them may be used to illustrate the general situation in which many others share. They are not far from one another, four in Massachusetts, the other three within a radius of a hundred miles of New York, all in the northeastern corner of the country. Their nearness in age corresponds with their geographical nearness. Though Mount Holyoke's history as a seminary begins just short of a hundred years ago, as colleges they are

none of them far from fifty: Vassar, Smith, and Wellesley have passed the half-century line; Radcliffe, Bryn Mawr, and Barnard will cross it shortly. And as they all of them represented the same period of American educational history in their founding, they arose from not dissimilar conditions and dealt with the same difficulties.

For the early years at least they made bricks with little straw. They had first to create their clientele, for communities on the whole looked on at the initial processes of this new education with little sympathy and no imagination, and discreet parents hesitated to trust their daughters to so untried a venture. The girls' schools and seminaries of the day had devised their own courses of study to prepare their pupils for careers as wives or maiden aunts with perhaps a year's fling at teaching; and it was a slow process either to persuade the older schools to change their ways or to encourage new schools which should lay the foundation for a further defined and difficult course and leave the fewest possible chinks of

preparation unfilled. The problem of the choice of teachers in the new colleges was perplexing, and as a matter of fact variously met, for in some cases it was thought unwise, and it was often difficult, to secure men as teachers, and yet the number of women who could themselves direct the work of college students was limited. With time a kind of equilibrium was reached in all the colleges, and faculties of both men and women with substantial scholastic training were built up.¹ The early colleges had small endowments and could charge only small fees, with the result that teachers worked long and late for low salaries, and it was a slow and painful business to push up the original endowments so that there were more teachers more adequately paid. From the first no one of the colleges fought shy of the question of residence. All except the two city colleges, Radcliffe and Barnard, where a large fraction of the students lived in their own homes, built dormitories and brought their young women together; and this policy was of great advantage in adding to the formal training of the curriculum the wide education given by a common intellectual life outside the classroom or laboratory hour. In face of every difficulty of space or money the principle of the residence hall persisted.

With the original likenesses far outnumbering their differences, these seven women's colleges — and with them many others — have traveled on their fifty-year road. There has been no marked divergence on the way, and naturally enough they find themselves still at one in their situation and interests. There has been a fairly general conversion of the community. Many parents have concluded to educate their daughters at the same length and with the same thoroughness as

their sons, and excellent schools, public and private, lay the foundations for college work. The original small endowments have been added to, and libraries and laboratories, as well as salaries, have been enlarged. Everywhere professional schools have been opened to properly trained women students. The hearts of communities have softened, bodies of alumnae have grown up around each college, and each has made for itself friendships full of lively and generous interest. There is without question a glamour of temporal well-being around them all.

In reality, to the closer-seeing eye, beneath the glamour lie grave and immediate perplexities. The thoughtful friends of the colleges for women, who believe in their usefulness to the American community, and who see that this usefulness is ominously threatened, are themselves, as will be apparent, almost helpless in the matter. But they can at least set the situation as they see it before that community, concerned, as they believe it is, in the education of its women as well as its men.

II

In the seven colleges which are being used as roughly typical of all colleges for women, six hundred graduate students² and eight thousand undergraduates are studying. The latter, living in college halls as they do, form more or less compactly woven communities. Against this arrangement can be advanced the reproach of an artificially contrived life, but at least two great advantages can be set down in its favor. First, it provides an atmosphere in which hard and continuous mental work is possible. In each instance the college has established its own campus,

¹ Radcliffe drew and draws all its teaching staff from the Harvard faculty.

² Women graduate students in Columbia University register in the Graduate School, not in Barnard.

large or small, set its buildings together under the vines and fig trees it has planted, and thus ensured for the working days of the week a greater freedom from outside demands and from flickering momentary interests than can be possible in most homes. This advantage is not merely negative. In the hours rescued from interruption, hours which never appear on college schedules, it is possible for the student who wishes it to have many and rich contacts with the older scholars on the faculties as well as to plunge into discussion and feel the sharp goad of her contemporaries. Second, it brings the girl perforce into touch with a variety of human beings. The women's college is in every case the landlord of its shifting tenants. In not one has the sorority system with the sorority-controlled houses sprung up, bringing in its train — whatever its advantages may be — the disadvantages of the small intimate group with its limited responsibility in contrast to the wider interests and the democratic rubbing of elbows of the larger college community. The sex and age of the individuals in the community may be monotonous, but little else about them is. The students who live in these halls and come and go together from the classrooms and libraries and playing fields are drawn from a wide range. Mount Holyoke, Smith, and Wellesley, for example, all in a single New England state, draw respectively sixty, sixty-six, and seventy per cent of their students from states outside New England.³ And wherever there is a graduate school the range is wider still.

Again, the students come into residence together from very varying conditions. Though the great mass are of that scripturally blessed class which has

neither poverty nor riches, in the student body is represented every kind of American home. The girls have been variously prepared. Forty-seven per cent are products of the public schools all over the country, thirty-one and one-half per cent of private schools of an equally wide range, and twenty-one and one-half per cent of a combination of the two. A few have prepared themselves. In the last few years more students have presented themselves than could be properly housed, fed, or taught by a conscientious administration, and, from the waiting list of girls ready to enter, it has consequently become possible to make some kind of selection. The method of this selection varies. A majority of the women's colleges have set the entrance examination as an important factor in the choice, and all of them study the testimony available in the minutiae of school reports, in the careful estimate of school faculties and principals, in personal interviews where possible, and in some form of mental test. No one of the colleges is entirely satisfied with its way of choosing, and every college tries incessantly to devise more accurate and satisfactory ways of choice.

With the students once admitted, and their own more direct responsibility begun, the women's colleges have tried to see that the work was well directed. With blood and sweat, presidents or faculty committees have tried to select for their faculties proved or potential scholars, and an effort has been made to make sure at the same time that these men and women are good teachers — that they have both the dream and the interpretation thereof. On the whole the struggle has availed. The teaching staff holds a dignified and important part in the government of the college, in the devising of the curriculum, and in establishing the experiments in learning and teaching

³ About forty-five per cent of the undergraduate students at Harvard and about sixty per cent at Yale come from states outside New England.

by which the college is to grow in wisdom. Curricula are of late years forever in the melting pot. From the time of the great original experiment which was to prove that a woman could actually take a man's education, the women's colleges have never been afraid to experiment, though they have often had to look to their scanty resources and turn away from some tempting venture. The graduate schools of Radcliffe and Bryn Mawr, boldly established simultaneously with their undergraduate schools, at once made it possible for women to go beyond the limits of the first degree, and both colleges have made a generous number of fellowships and scholarships available. For ten years Wellesley has had a two-year course in physical education for young women already college graduates, which has set a standard for the teaching and practice of hygiene and physical training in schools for girls and colleges. Vassar's Department of Euthenics plans a completely new venture in the education of women to a particular end. Barnard's curriculum represents a bold step away from the old and rigid requirements of the academic college — none bolder, and an honors system is in operation at Smith which is far to the fore among the many plans of similarly experimenting colleges. Several of them have made noteworthy experiments in wider fields during the summer holidays of the college proper. Smith has a Graduate School for Social Work, begun as a part of its war service, but now holding an established position among institutions of its class; Mount Holyoke a school for the study of German, which is on the way to repeat for students and teachers what has already been done elsewhere for their confrères in French and Spanish. Vassar has established a summer Institute of Euthenics with a nursery school as its handmaid. Bryn

Mawr has for six years given over its buildings to a summer school for a hundred women workers in industry, an eight weeks' session, which has proved one of the most interesting experiments in adult education in the country; and Barnard has opened a similar school for workers in New York City, young women who cannot leave their homes but can study in a nonresident school.

The libraries and laboratories of the women's colleges are equal to those of many colleges for men, and in some cases superior in their resources. The work of the students is not seasonal; the steady routine of the year is not broken in on by feverish periods of intercollegiate athletics. But beyond and above all in importance, both to the individual college and to the whole group of women's colleges in the country, is the fact that, with all individual exceptions allowed for, there is in general an understanding between the women's college and the student that she has come to work seriously at a long and arduous task which is important for her as an individual, but also important because she is to be later a member of a community to which she must make a serious contribution. Not only the casual comment of the male members of her family in the president's office, but the more deliberate judgment of members of the faculty or staff who exchange the coeducational university or the men's college for a chair in a women's college, testifies generously to this. The undergraduates now at work in the women's colleges are a good gamble educationally.

That is known best, perhaps, by those who see them most. The community knows more directly through its experience of their mothers or sisters, of the many thousands of alumnae who have been trained where the few thousands of undergraduates are studying now, that the new generations are in

their turn to be an important group for the country at large. The day of these *alumnæ*, even in the oldest women's colleges, has not been a long one, and graduates of the first classes at Vassar, Wellesley, and Smith are still in evidence. But, in spite of its brevity, the record of the graduate has proved her intelligence, persistence, and public spirit. Of the professional women among the number the great majority have gone into teaching. Sixteen per cent of all Vassar and Bryn Mawr graduates are teaching this year;⁴ twenty-five per cent of Barnard, Radcliffe, Smith, and Wellesley graduates, and from Mount Holyoke fifty per cent. Very many of these teachers, probably the greater number of them, are in public schools, but they make up in large measure the teaching staffs of the private schools in the East, and the headships of the private schools are largely in their holding. The progressive schools especially have attracted them, and in that scouting group they have contributed noteworthy experiments. They have from the beginning also taught in the college as well as the school. Naturally enough the teaching positions carrying the largest responsibilities of scholarship and the highest salaries are in the women's colleges themselves. Unfortunately for women and unfortunately, we make bold to think, for the institutions, but a small fraction of the places on the faculties of coeducational colleges and universities are filled by women; especially in the upper reaches few women are given appointments. And though the women's colleges have recognized that their students should be taught by men as well as women, the colleges for men have not yet ventured on this liberal attitude and there are no women on their faculties.

⁴ Forty per cent of the holders of the Master of Arts or Doctor of Philosophy degree.

But the women's colleges have done much more than supply each other reciprocally with teachers or positions; they have not lived by taking in each other's washing. Scholars whose foundations were laid in the colleges for women have gone far afield in college teaching and administration. To illustrate from the seven colleges whose graduates are here particularly studied. It is not perhaps surprising that in other colleges, in many cases daughters of the older institutions, a president or dean or faculty member should have received her training at Mount Holyoke or Wellesley. Florida State College, Goucher, Hood, Knox, Lake Erie, Lake Forest, Mills, Milwaukee-Downer, the Pennsylvania College for Women, Russell Sage, Sweet Briar, the Western College for Women, Wheaton, all have president or dean trained in one of the seven colleges so often named. In the women's colleges directly connected with colleges for men, at Brown, at Rutgers, and at Tufts, the three deans have had this same training. The adviser of women in the School of Education at Harvard and in the Graduate School at Yale, at the Universities of Pennsylvania and Virginia, the deans at Swarthmore, Oberlin, Leland Stanford, Pomona, the Universities of California, Colorado, and Vermont, are *alumnæ* of the seven women's colleges. Three such *alumnæ* broke the ice to become the first deans of women at Minnesota, Wisconsin, and Cornell. But they have also gone outside the purely academic administration to which their own education more directly led. They have attacked other educational problems. The Dean of the Woman's Medical School in Philadelphia, of Simmons College, of the Margaret Morrison School of the Carnegie Institute, of the new Curtis Institute of Music, the Director of the Resident School for Women Workers in Industry,

of the Simmons School of Public Health Nursing, have all had the education of the academic college for women as their own foundation. Of the two newest experiments in colleges for women, Scripps in California and Sarah Lawrence in New York, Scripps is calling its new faculty largely from the women trained in women's colleges and Sarah Lawrence College has named a graduate of Vassar as its first president. The much talked-of Bennington experiment includes a curriculum drawn up by a member of the Wellesley faculty, now the head of a college preparatory school.

On all *alumnæ* lists of professional occupations the doctor follows the teacher, and the women in the great Eastern medical schools are largely recruited from these *alumnæ*. At the Cornell Medical School in 1926 twenty-one out of the thirty-eight women students were graduates of colleges for women, at Johns Hopkins twenty-three out of thirty-three, at the Physicians and Surgeons in New York forty-six out of fifty-four. At the School of Nursing at Yale University, which lays stress on the importance of a college degree, out of twenty-one students with degrees twenty came from women's colleges. In medicine, scientific research, journalism, social work, the arts, such names as Dr. Florence Sabin, Miss Annie J. Cannon, Mrs. Ogden Reid of the *Herald Tribune*, Miss Julia Lathrop, and Miss Theresa Helburn, Director of the Theatre Guild, represent a large number of college graduates of less fame but great usefulness.

III

The services of the *alumnæ* to their communities, whether formal or informal, whether through raising a profession or a family, are constant. There is no longer a cleavage between the

married who have gone into the home and the unmarried who have gone into the professions, for the lines of separation no longer coincide. Among the women doing active and useful professional work are many who marry and have children, and an increasing number are still carrying on part- or whole-time jobs outside their own homes. One may say in passing that the proportion of married graduates of the colleges for women steadily if slowly increases. It has passed fifty per cent in almost all of the women's colleges and its trend is still upward.⁵ Whether she is married or not, whether she is closely tied to a profession or not, the interest of the college graduate in the community is a keen and a generous one. Many names in such an organization as the League of Women Voters, from its president down, are to be found in the college *alumnæ* catalogues, and it is so with such boards as the National Board of the Y. W. C. A., the Foreign Policy Association, and so forth. The retiring chairman of the American Council of Education is a graduate and the present dean of Barnard; the chairman of the College Entrance Examination Board is a graduate of the Women's College of Brown and the president of Mount Holyoke College. The present president and a majority of the former presidents of the Association of Collegiate *Alumnæ* and its successor, the American Association of University Women, have been graduates of the women's colleges. Through the country the *alumnæ* of women's colleges are serving on school boards and boards of health. They are somewhat cautiously making their way into politics and

⁵ It is probably about the same among the sisters and cousins of college graduates who have themselves not spent the years between eighteen and twenty-two in college — that is, it is fairly representative of *all* the daughters of the families on college lists.

serving in legislatures and on state and national committees. They are good and responsible citizens. The only conspicuous group of committees from which not only the alumnae of the women's colleges but women in general are absent is the boards of the great national foundations.

To those who have been closely concerned with the education of women it is natural that these colleges, which for fifty years have sent out such intelligent and socially minded graduates, should yield in importance to no other institutions or group of institutions. If women, the mothers and teachers of the next generation, are to have as good an education as their brothers, as solid, as intelligent, and as farseeing, then that education must be established so that it cannot slip backward. Further than that, it must be given every chance to advance without rigidity or restriction. The women's colleges must parallel the education offered, not by the mediocre colleges for men, but by the colleges which train men most efficiently, for, unless women are to be less seriously trained than men, the first rank must be the same for each.

It is precisely at this point that we meet the crux of the question confronting the women's colleges to-day. Are we in America prepared to admit the right of women to the same quality of educational opportunity as men? If we are, it follows that the institutions for women should receive financial support in proportion to the tasks laid upon them. Such support has not so far been given.

It would not, of course, be just to compare the endowments of colleges whose work is mainly undergraduate with those of universities which give graduate and professional training and undertake research on a large scale. But a comparison of the women's with the men's undergraduate college shows

a large disproportion in invested funds. The largest of the women's colleges, for example, has endowments yielding annually less than one hundred and twenty dollars per student, compared with five hundred dollars enjoyed by its nearest neighbor among the men's colleges. The difference is made up by charging higher fees and by greater economy of operation. The fees have already been raised to the point where the number of students from the less well-to-do families is showing a serious decline. A substantial part of the income from increased fees has to be used for scholarships to retain our clientele even among the daughters of teachers, ministers, doctors, and other professional men on moderate salaries. It is from these classes that in our experience come the largest proportion of good minds. We need them to maintain the intellectual quality of the colleges, and it would be a great loss to the country if these girls could not be given the educational opportunities of which they make so excellent a use. We need them and their still poorer sisters to maintain the democracy which has always been a valuable element in our academic life. In spite of all our efforts the proportion of students from public high schools is steadily declining; and a relaxing of these efforts would speedily bring us to a situation in which ninety per cent of our students would come from expensive private schools. Such a result would be a calamity for all concerned.

The difference in per capita yield does not tell the whole story. In most of the men's colleges the housing problem is largely solved by fraternities and clubs, and there are no corresponding institutions in the group of women's colleges under discussion. Dormitories have to be built out of contributed funds, and their management increases the cost of administration. The present

cost of building is such that the return from rents makes them a poor investment. The money given for fraternity houses by alumni does not appear in the assets of the men's colleges, but it is in effect an additional endowment.

'Greater economy of operation' may not sound like pure loss, but it is necessary to see what it involves. Among the minor implications are restrictions on library and laboratory equipment, less opportunity for legitimate athletics, poorer apparatus, and less leisure for research on the part of the faculty. But the major implication is a smaller salary budget, involving a lower scale of salaries or fewer teachers or both. For the last ten years salaries in the men's colleges have been steadily rising, and, the supply of able teachers being strictly limited, this means more and more severe competition. The women's colleges have also increased salaries, partly by means of funds raised by *alumnæ* and a few generous outside friends and foundations, partly by means, as has been said, of higher fees. But the *alumnæ* are exhausted by their efforts, and the limit of higher fees has been reached for present economic conditions. We must, therefore, expect more and more to have our best men drawn away from us by our wealthier brothers.

What we are most concerned about is the quality of the intellectual life of our institutions. To maintain the present level, and still more to raise it, there must be money enough to retain our good scholars, to give them reasonable working schedules, to afford them time

and resources for research and writing. Positions in the women's colleges must be made positively as well as comparatively attractive, and this to first-rate women as well as to men.

It is easy enough to see how the situation has come about. Most of the money in the country is in the hands of men, and those disposed to give or bequeath large sums to education naturally think first of their own colleges. Even when their fortunes are at the disposal of their widows, the alma mater of a husband or son is much more likely to benefit than a college for women. To thousands of families in which both husband and wife are college-bred, simultaneous appeals have come during these last seven years for contributions to a campaign. In how many cases has the wife's college fared as well as the husband's?

The question which we wish to raise is one of fair play. We have sketched the history and achievements of the colleges for women. They invite scrutiny and they can stand comparison. They are eager to go on, to develop, to experiment. The material which is being sent them in great numbers consists of the daughters of men who hold them as their dearest possessions. For their physical welfare and for their pleasures they lavish their means. For the training of their minds and the development of their personalities the provision they make, in comparison with that made for their brothers, is meagre and grudging. Do Americans believe in educating women or do they not? If they do, the question is one of justice rather than of chivalry.

THE UNKNOWN SOLDIER

BY JAMES TRUSLOW ADAMS

As it happens, within a span of not many months I have stood beside the graves of three Unknown Soldiers: one buried on the green slope of Arlington at Washington, one who rests beneath the stone flags of Westminster Abbey, and one buried in the middle of the swirling street traffic of the Place de l'Étoile in Paris. Italy also has her *milite ignoto*, and doubtless others lie in other lands whose troops took part in the Great War. Even making all allowance for the laws of imitation and the herd spirit which govern so much of our life to-day, this widespread honoring of the unknown dead is a phenomenon worth considering.

Man has always delighted to honor the great and those who have performed conspicuous service according to the ideas of their age and place. But now for the first time whole nations, and those the most enlightened, have come to honor the man of whom we know nothing, the Unknown Soldier. As a matter of unfortunate fact, the particular body may be that of one who fought the draft to the last ditch and was a slacker in service. That, however, is of course wholly irrelevant; for it is not really the Unknown Soldier who thus receives the almost religious adoration of his people, but the Common Man, for that is what he is intended to typify — the ordinary man who, willingly or unwillingly, served his country and, either because of the lack of a fortuitously happy combination of circumstances, or perhaps because of the lack of inherent ability, failed

to make a known and notable record.

Of course, it may be claimed that what mankind is worshiping at this tomb is in reality 'the soul of the nation' or 'the totality of suffering and struggle and failure and death and victory.' But even if this is true, which I doubt, so far as the generality of the long line of worshipers is concerned, — ordinary folk who are not given to rising to abstruse reflections on patriotism, life, and death, — nevertheless the choice of the symbol remains unaltered. Heretofore throughout all history it has been the great leader who has symbolized a cause or a movement or an aspiration. *La Patrie* in France used to be worshiped in the pure and girlish figure of the Maid of Orleans. For that 'totality' of ideas and emotions and hopes for which Christianity has stood, it was Christ who was worshiped, not some 'Unknown Christian.' No, sublimate the idealism of that tomb as one will, the fact still remains that mankind has taken the unknown man, the common man, to symbolize to-day whatever lofty emotions may be aroused by that silent body; and the more lofty the idealists proclaim them, the more striking is the contrast between them and their symbol. In the century that has elapsed between the placing of the corpse of Napoleon beneath the dome of the Invalides and the burying of the unknown *poilu* beneath the Triumphal Arch, there has occurred the most mighty revolution in man's thought that he has ever known.

It has come, this honoring of the

symbolic unknown dead, to be a cult. The first thing that a distinguished foreigner must do on visiting the countries of these canonized Unknown is to go and place a wreath on the tomb, though the visitor himself may never have had anything to do with the war, already ten years past; nor need his visit have the remotest connection with anything military. It is about this unknown common man that the real religion of the present day is crystallizing. No one cares a rap whether the distinguished visitor honor the God of the country he is visiting by attending worship in any of its churches, but he *must* worship, wreath in hand and with bowed head and silent prayer, its Unknown Soldier, its common man.

In literature also the common man has become the hero. Rarely now does the serious drama depict a protagonist who by any stretch of the imagination can be considered a great character. We are more apt to find ourselves watching the insane rage of a ship's stoker or the marital complications of an utterly uninteresting and inconspicuous commuter in a New Jersey suburb. The men and women sung in our poetry mostly deserve just such epitaphs as they get in *Spoon River Anthology*. In fiction we have abandoned *Vanity Fair* to mingle with the drab and narrow inhabitants of *Main Street*.

This admiration for the undistinguished is a comparatively recent development. Of course the common man has for long been coming into his own — and some of ours — economically and politically, though perhaps he has not in reality got so far politically as he flatters himself that he has, save to muddy the waters. He has been steadily forcing himself on the world, but perhaps his most astounding achievement has been to force himself into the leading place in our arts and, at least our publicly avowed, admirations.

It is a mistake to think that the Fathers of this Republic had any great regard for the common man as such. The tradition in that respect which his flatterers have tried to foist on the rest of us will not hold water. Here and there, indeed, were leaders ahead of their time, like Thomas Hooker, Roger Williams, or Thomas Jefferson, who believed in the common man and told him so. But for the most part the leaders in the 'great migrations' and the Revolutionary period, although they may have told him so, did not believe in him. In the colonizing days John Cotton and John Winthrop had about as much faith in democracy and the ability of the common people to govern themselves as had George the Third or Louis the Fourteenth later. Cotton Mather, at the beginning of the eighteenth century, in a fit of spleen spoke of his plebeian fellow townsmen as 'insignificant lice.' Alexander Hamilton's testy remark is well known: 'The People — your People, Sir, is a great beast.' Washington, so Jefferson reports, although believing that the people should exercise as much power as they were capable of using wisely, did not have nearly as much faith in their ability and honesty as Jefferson himself did. As for the opinions held of the common man by most of the lesser Federalist leaders who ran America for nearly the whole of the first two decades after the Revolution, they are almost unprintable.

Then along in the 1840's came Bancroft and others who began to write the heroic legend of the country's past, and the common man began his enchanted ascent in public estimation. In Lincoln it was thought that the common man had at last blazed forth in a trail of glory, people forgetting, of course, that although Lincoln was born in poverty he was not a common, but a most uncommon, man. If he had not been,

he would have probably remained in obscurity with the rest of the herd of poverty-stricken pioneers and rail-splitters who *were* common men and who never emerged. As for his alleged remark that 'God must have loved the common people, He made so many of them,' I frankly doubt if he ever said it, at any rate with serious intent. It is too silly. One might just as well say that God must have loved fleas or cock-roaches or the yellow-fever mosquito, He made so many of them.

But little by little the common man has got where he is and now receives the homage of poets and novelists, and his bones rest at Arlington and in the Abbey and under the Arc de Triomphe. The trades-unions key their work down to the capacities or inclinations of the lowest of his type in ability. Our public schools and, to an alarming extent, our colleges are standardized on the mental level of his progeny, so that a college degree has ceased to have the slightest cultural meaning. The mystic letters A. B. have come to have less significance as 'Bachelor of Arts' than as 'Able-bodied Seaman.' If a man desires to be president of these United States he must make himself in public as near the common man as he can — indulge in the theatricalism of Roosevelt, be photographed wearing a Shriner's turban like Harding, or with a pitchfork or in chaps like Coolidge, however remote such antics may be from his nature. The cultivated gentleman, no matter how strong his character, how great his ability, how profound his knowledge of the complex problems of the modern State, is no longer a possible leader unless he is also 'folks,' unless he can camouflage his superiority and make the common man believe that after all he is as common as himself at bottom. America pretends to worship education, but I cannot recall a single photograph of any president with a book in his

hand, though I have seen innumerable ones of presidents carrying a milk pail, handling an axe, pitching hay, or trundling a wheelbarrow.

It does not make so much difference, perhaps, how all this has happened as what it means and what it is going to lead to. What does it signify that the world to-day worships the private and not the general? Of course in time we may get some high staff officers into the Abbey also. They seldom die in battle and the supply of bodies has been scant as yet. But, even if we do, they will never again rank above the Unknown Soldier in death, however they outranked, and in qualities of leadership surpassed, him in life. That epoch of history appears to be closed.

That the common man has many admirable traits is undoubtedly true, and I would be the last to deny them. That he often deserves more praise and recognition than he gets I have also observed often enough in a life which has taken me to many places, among many kinds of people, on many different pursuits. But his qualities are for the most part the same fundamental ones of courage, kindness, generosity, faithfulness, and so on, which are common to all decent men of all grades. On the other hand, the common man lacks qualities which the great man possesses. It is needless to say that by 'common man' I intend no snobbish reference to wealth or social position or early opportunities. I mean by the 'common man' merely the ordinary man who has never in his life done anything distinguished, who is incapable of high emotion, who has never raised himself, mentally or spiritually, above the herd, who has never conferred any benefit on the race, or who at death, except for the sorrow of those near who loved him, leaves no more behind him for the rest of us than a pet dog. I know plenty of common men among the

rich and heralded, whose possessions and chance position have nothing to do with their qualities. But, on the other hand, I doubt if there are many great or even talented men among the people who do not somehow make themselves known or felt in time by their services or achievements. I doubt if there are many unknown hands buried in Stoke Poges or other 'country churchyards'

. . . that the rod of empire might have sway'd,
Or waked to ecstasy the living lyre.

At any rate, leaving aside that dubious and unanswerable question, we come to the main point of my inquiry. Is it a symptom of health or disease to worship the sailor rather than the captain, the private rather than the leader, the common rather than the great man? Or have we suffered a transvaluation of values and is the common man now the great man rather than the sort we used to call great? If this is so, is it not evidence of that intellectual and spiritual leveling down that has been feared by so many who have, not unsympathetically, studied the possibilities of political and social democracy? Is the unknown X. Y. who worked hard to earn a scanty living, who was good to his wife and dozen children, back in Lincoln's time and country, but who never 'got anywhere' beyond exercising the homely virtues, really going to be a better hero to hold before a boy's imagination than Lincoln himself? Is the career of an ordinary sailor more of an incentive to ambition and the hope of doing glorious deeds than that of Nelson? Or perhaps we should ask, as the navy has not yet gone in for 'Unknown Sailors,' is some private at Valley Forge to be worshiped rather than Washington? In literature are we going to obtain the same mental and spiritual illumination by watching crises in the third-rate emotional life of petty people, who live

on Main Street because they belong there, that we do by watching the struggle between circumstance and really great character? In drama the confronting of great character by great crises does give us that 'purge of the emotions' which was claimed for it in ancient Greece. Is not the purge the theatre gives us now of a very different sort?

If instead of the great man we worship the little one, if instead of occupying our thoughts with the rare and the fine and the great we devote all our time and admiration to the petty, the commonplace, and the plain common, are we not likely ourselves to become more and more like the objects we worship? Why spend laborious nights in study to train our minds, why attempt to mould our characters to something higher than the mob, why strive for high thought and action, why dream of high endeavor, why strive to fit ourselves to lead, if, after all, we are still no better than the led, and the world's leaders and benefactors are really outranked by Sal the sandwich slinger and Bill the stoker? And if they are not really outranked, if the leaders are really more worthy of admiration and imitation than the led, if the great and the noble are really finer than the common man, then why all this hypocritical pother? Is it that the common people now in truth have the power, that man always worships what controls him, and that the qualities of Demos are those which from now on must more and more command the world's homage? If that is so, then Democracy has indeed failed and the upward progress of civilization has come to an end, and in worshipping the Unknown Soldier we are worshipping at the grave of a far greater dead, the corpse of man's aspiration for something finer and higher and nobler than himself, the corpse of man's aspiring soul.

SILENCE

BY MARGARET PRESCOTT MONTAGUE

I

SHE came in at dusk, when the April twilight was slanting gray-green in the room where Ann Eversole waited. Outside, a small detached wind went through the trees, touching them almost leaf by leaf, turning them over, looking, as it seemed, for some lost treasure. The bell in St. Andrew's tower was ringing, long pensive strokes, shadows of sound, as remote and absent as the wind. 'So the church bells in a tapestry might ring,' Ann thought. 'As though they did not belong here, but came down out of the past.'

Mrs. Newmarch's entrance seemed a part of the wistful evening; the gray-green twilight opened to let her through, the bells wafted her in on one of their far-away strokes.

The minute Ann looked at the older woman a pain tightened in her heart. 'But I won't speak — if I speak I'll make it true,' she thought, warding off the impending fate.

Mrs. Newmarch did not speak at once either. Crossing over to the window, she began pulling off her gloves very slowly, finger by finger. Then she put up her lovely slender hands and removed her hat, her hair showing silver against the green effulgence without.

'They tricked me, Ann,' she said. 'The appropriation for the crippled children has gone into their own pockets — that is, it has gone for paving streets that need no paving, the contracts for which will be let to their friends on a fifty-fifty basis.'

'I knew it,' Ann thought. 'I knew it as soon as the bells began to ring from far away. Things are not of this world for people like her — their fulfillment is somewhere else — but she minds horribly.'

'I'm *so* sorry,' she said out loud, a little catch in her voice.

'It was Wilbur Boggs's doing. He put the committee up to it, of course. But all the rest were ready enough; they only needed to be shown the way. They were all laughing. I saw that at once, in spite of their trying to cover it up — so futile of them, like mean little boys! They tried to be very polite, too — I mean as polite as they know how to be.' She drew the purple scarf she wore from around her neck. It fell away, Ann thought, with just the lingering regret of the church bells. 'It did not matter in the least that they laughed at me,' she explained. 'It did not even matter so very much that all my hopes for the crippled children had failed. But there was something else that mattered terribly. It was what they were doing to themselves.'

Ann crossed the room, quickly dropping down on her knees beside the older woman. 'You've worked for this town all your life. You've set your spirit against all the mean duplicity. There is n't a good thing or a beautiful one that has been done here for forty years that you have n't had a hand in. I think you wanted this appropriation for the children's hospital more than

you have wanted anything for a long time, and now these dirty blackguards with their feet in the trough have tricked you! It hurts me — it hurts me so that — if you wanted the lining of my heart to make a garment — or shoes for your feet — you could have it.'

Mrs. Newmarch put her hands down over the young eager ones Ann laid in her lap, smiling in the old way; but something jumped in Ann, startling her. 'She does n't hear me — does n't even know I've spoken! She's somewhere else — not here at all!' she thought with a little gust of fear.

'It was n't that I minded their laughing, you understand, Ann,' the remote voice picked its way through the twilight. 'That was nothing. To be laughed at by people who have tricked you is nothing at all — that I got used to long ago —'

'All my love is right here beside you!' Ann cried.

'I *must* get through to her! I must — I must!' she thought.

'It was n't the laughing that mattered, nor even what they had done to the children. What mattered — what was the awful thing was what they were doing to themselves, and not knowing it. Somehow that frightened me. I tried to make them understand — I felt I must. I made them a speech. That was very foolish of me — so useless! I could see them winking when they thought I did n't see. But I felt I must try. "Gentlemen," I said, "I congratulate you on your finesse." That was very foolish too, Ann. I ought not to have let myself be sarcastic; I should have been very straight and direct. Besides, some of them were not quite sure what "finesse" meant. They thought I was trying to show off with big words. "Aw, cut out the high-brow stuff!" I could hear them thinking. I saw my mistake and tried again. "Gentlemen," I said — I don't know

why I kept calling them gentlemen, except it seemed to me if I could just get through to their other selves I could make them understand. "Gentlemen," I said, "I realize that you have tricked me and are filling your own pockets with money that was promised for the children's hospital, but I beg you will not think I speak from personal chagrin." "Chagrin" seemed too ornate a word, so I changed it to "personal grievance." "That you have tricked me is of no consequence," I said; "nor is it even a supreme matter that you have defrauded these invalid children. The terrible thing is that you do not grasp the nobility of life, and therefore have no conception of what you have done to yourselves." I saw them laughing inside at that, Ann. "What we've done to ourselves! Say, that's pretty rich!" I could hear them thinking, and I saw Boggs slide his eye around and wink very secretly at Jud Handley. "Oh, I know quite well what is in your mind," I said. "You are thinking that what you have done for yourselves is not so bad; that one of you will get a new car out of this, another a trip, perhaps, and a third make the first payment on that house out at Crescent Park he has so long desired. But what you do not realize is that the man who plays politics with crippled children cripples his own soul so that forever after he goes halt and blind through the great adventure of life." But it was all useless, Ann. They did n't know what I meant; I just made them angry, and then of course I could n't reach them. I kept thinking, "If I can only find the right word I can surely make them understand." But I could n't find it, and now they were angry. I knew they were defending themselves with the same old phrases: "Well, of course politics ain't a Sunday-school picnic. If the ladies are goin' to play it with us they got to take what's

comin' — an' anyhow the old woman can't lecture us like a lot o' kids." They were right about that, Ann. I was talking down to them, but could n't seem to help it. Of course it made them angry — my mistake,' she said vaguely.

She began folding up her scarf very carefully, as though it were of the utmost importance that its edges should exactly meet.

'The nobility of life,' she repeated slowly. 'The great adventure — I saw it all in a flash. I wanted to make them see. It terrified me that I could n't. You must n't think it was altogether their fault, Ann — it was really mine. If I could have found the right word! But you see I bungled things and made them angry.'

'Your hands — they're so hot! Are you ill?' Ann cried.

With difficulty Mrs. Newmarch got to her feet. 'But I doubt if words would have helped — not even the tongues of men and of angels. Only silence — that might have made them understand. Not their fault — mine.' Her gloves and scarf slipped out of her hands to the floor. 'After all, I am not a young woman any more, and things seem — heavy,' she said.

Ann flashed the light on, and now she saw that the other's face was flushed, and her eyes curiously bright and expressionless. 'You are ill!' she cried. 'I must telephone to the girls, and Dr. Fletcher.'

Mrs. Newmarch put her hands up to her head. 'I remember now — I waked with a cold this morning. I'm feverish, I think — things seem so far away — queer. I don't think I should have heard them thinking if I had n't been feverish — nor have made them angry.' She was staring very fixedly at a large upholstered chair, explaining matters to it. 'But there is no right word — only silence,' she repeated, with a nod of finality.

Ann got her upstairs and, turning her over to her maid, rushed down again and telephoned to the married children and the doctor. The children came and were frightened. The doctor came and was reassuring in the sick room, but grave outside. 'Pneumonia, and with her heart — Temperature very high — slightly delirious, of course. But we'll put up a good fight.'

II

The fight was lost. 'It was lost before it began,' Ann thought. 'It was all over when the wind went through the trees from far away, and St. Andrew's bells began to ring like church bells in a tapestry.'

Ann did not see her friend again in life. Mrs. Newmarch's children and the nurses were with her. She was delirious at first; then a long coma set in. She died early in the morning, just a week after the evening when she came home and Ann was waiting for her in the April twilight. 'And the evening and the morning were the seventh day,' Ann thought, staring at the cluster of white roses and purple tulle hanging from the bell, as she waited on the doorstep.

Miss Evie White, Mrs. Newmarch's elderly cousin, opened the door for Ann and whispered to her: 'Yes, just at four this morning. Never regained consciousness — just slipped away. Yes, from St. Andrew's, of course, to-morrow at eleven, but they want her especial friends to come to the house a few minutes before. My dear, she is perfectly beautiful! More beautiful than anyone I ever saw. You must take in your own flowers. Lilies of the valley? Ah, she loved them so! I remember as a girl —'

The disjointed whispers trailed into silence as Ann followed her down the hall through the library and to the

door of the front drawing-room. 'May I go in alone, please?' Ann asked. Miss Evie nodded and, opening the door, withdrew. Ann was alone. She was conscious of the cool room, and the fragrance of many flowers: the intimate sweetness of roses, clusters and clusters of them; the spicy freshness of carnations; the fragrance from the lilies in her own hand and from Madonna lilies somewhere, too, and something else? Oh, yes! Irises, a great purple sheaf of them. That was nice. Someone must have rushed out into a garden in the cool morning and cut all its bloom for her.

Ann let her eyes rest first on the flowers — they were stepping-stones of approach to the sanctuary. Then at last she turned and looked. For a long time she stood completely motionless, hardly breathing, awe-struck by the overwhelming Presence before her. There were no words that could in any way express the beauty, the nobility, the aloof majesty of the face before her, the great dignity of the brow, the finality of the folded hands. 'It is finished,' Ann whispered as she looked and looked. 'But there is nothing to say — only silence. I knew she was a great personality, but I only brushed the hem of her garment. There is n't anything to say — nothing any of us can say any more. I will go softly all my days — something tremendous, overwhelming, is here. It — it frightens me.' Her spirit seemed poured out through her eyes as she looked and looked. 'Her body is here,' she thought, 'right here in this room. I might touch her hands, but she is away, away, owning herself forever. Nothing for any of us to say any more.' Her whole being shifted into deeper levels of awe. She knew herself on the very edge of something overwhelming, terrifying almost, because of its solemn beauty and complete finality.

'The dignity of life — the majesty of death —' Her mind groped, but could find no satisfying interpretation.

Tip, tip, Miss Evie came into the room. 'Ann, you have a black dress, haven't you? Could you lend it to one of the girls? You and Julia are about of a size.'

'Yes, of course. I'll bring it around. Let me stay a little longer, please.'

Again Ann was alone in the room where for a moment the awful mysteries of life and death were met. Once more she could only approach the Presence gradually by way of the flowers — lilies, carnations, roses, irises, more roses, more roses — at last the hands folded in that ultimate repose, the face, the overwhelming mystery of the brow. 'She knows the secret,' Ann thought, 'but cannot tell us. Each of us must find out for himself. No words, nothing big enough to say about it — but I *feel* a rushing mighty wind. It's awful to have the spirit come so close. I'm too small a person, too inadequate, to be on the edge of anything so tremendous, so complete. It makes me gasp. I feel breathless — not in my body — in my soul. I could n't stand it; I'd have to go away — only the beauty — that is a gift, a revelation. It makes you understand how marvelous life is — how mysterious and wonderful all human beings are — all of us part of a tremendous whole. The adventure of life — amazing! We have no idea of the wonder of it right here before us. We can't grasp it — too big for us to lay hold of — and so we go on dragging it all down to small ends. The nobility of life — that is it! That was what she tried to make those men see, Wilbur Boggs and his crew; but of course they could n't understand. Yes, they could, though, if they could see just for a moment how much bigger they are than they guess. I must n't stay too long. She saw it all plainly.

I know now what she meant—the nobility of life. She thought it was her fault that she could n't make them see it, too. Do all great people feel this responsibility to the small ones? She saw life for that flash just as she looks now—of course she tried to make them understand. I must n't stay too long. I wish there were some great music being played—something in me needs it. But there are no words—nothing big enough in me for it—only silence. My thoughts even don't touch the heart of this emotion. No, not big enough—a rushing mighty wind—

Again she was conscious of Miss Evie wavering on the threshold. Ann joined her.

'Ann, could you be at the front door this afternoon from about five to six? I have all the other hours arranged for.'

'Of course—thank you for asking me.'

'Then I'll count on you. My dear, you look very white. You must n't take it so hard. We have to lose our friends in this world. I've lost almost everyone; but what can you expect? It's life.'

'Oh, no! That is n't life! Life is n't loss—it's something else—something marvelous. We don't understand at all. I almost understood—in *there!*' Ann cried.

'But she has n't seen at all,' she thought. 'She does n't understand. If you almost meet the Holy Ghost face to face, of course you take it—hard.'

III

'The nobility of life'—the words returned again and again to Ann's mind as she took her place that afternoon at the front door. She could see through the curtained panel out into the street where people went by under

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the budding trees. 'But they don't seem to know in the least how marvelous the whole adventure of life and death is. They pass like sleepwalkers,' she thought.

Many people came up the steps to leave cards, to whisper messages of sympathy or offers of service, and to bring flowers—more and more flowers. Ann opened the door a little way, received the messages and flowers, made careful lists of the callers, answered questions, whispered when the funeral would be, and asked Mrs. Newmarch's intimate friends to assemble at the house beforehand; made notes of people who offered to take others in their cars; received more flowers, more cards.

Many organizations and committees with which Mrs. Newmarch had been associated sent elaborate floral pieces—anchors, crosses, sheaves of wheat. 'Yes,' Ann thought, 'the public conscience of this community has died—of course these others rejoice to send wreaths.'

But she repented the thought at once, for its cynicism broke the serenity in which for the present her spirit dwelt. She had caught the grave beauty which death had stamped upon her friend's brow, and, though she found no words with which to interpret its meaning, she had received it into herself like a clear effulgence. Standing there at the door, giving messages and receiving them, she felt herself in an interlude between two worlds. A veil was drawn between herself and everyday existence. The veil of death? Of life? She could not say what it was; only in the house was complete stillness, in the room near by the presence of death, while there in the street before her people moved in and out of the sunshine and green April shadows like people passing remotely in a mirror. She could hear

the traffic sliding by, the brisk or loitering steps of pedestrians, and the laughter of children. Now a man was calling, 'Strawberries! Strawberries!' Presently he came into view, nearer and nearer: 'Strawberries! Strawberries!' He was passing now, a negro in blue shirt and overalls, his tray of red berries balanced on his head, in which manner he moved with the grace of a hidden rhythm. 'Strawberries! Straw — ber — ries!' He faded from sight under the green trees, his cry passing into the distance. A fat yellow bus came rolling down the street, and more and more automobiles, their sleek sides winking in the sun. Across the way two newsboys were romping, their bundles of papers under their arms. A little lame boy hopped by on a crutch. He paused a moment to watch the runs and dashes of the other boys, then, with a defiant waggle of his crutch to make them think it was fun to be lame, hopped away out of the picture.

Now a car was stopping by the curb. A man got out of it and, turning back, received a huge wreath from another man within. Ann thought she saw a smile slide between the two. They waved their hands in farewell as the car moved on. The man who was left looked up at the house, shook down his clothes a little, adjusting himself to the atmosphere of death, then came up the steps, bearing his pompous wreath. It was Wilbur Boggs, Chairman of the Appropriation Committee. 'I wish someone else were at the door,' Ann thought. 'But after all, it does n't matter — none of the little meannesses matter now.'

She opened the door a little way, but Mr. Boggs's mission was too important to be transacted from without. He thrust himself forward, and to admit his huge wreath Ann had to throw the door wide, so that for a

moment the warmth and noise of the street eddied into the still hall.

She surveyed the wreath. 'What is it?' her thoughts jibed. 'The largest make of automobile tire, I suppose.'

Mr. Boggs carefully removed some tissue paper which still covered the flowers, handing it bit by bit to Ann, the servant for his importance. When the wreath was all disclosed, he directed her eyes with a gesture — evidently he could not speak in the house of death — to a card affixed to the purple tulle bow. 'From the Appropriation Committee' the card read, and underneath was a list of names. He placed his thumb nail, not scrupulously clean, beneath the top name, holding her attention to the words 'Wilbur J. Boggs, Chairman,' then, tipping the thumb back, he transferred it to his own chest. It was all-important that she should realize that the Chairman himself had come in person.

Ann nodded. 'I understand — I understand perfectly. It's the largest — er — appreciation of them all,' she whispered, and held out her hand for it. But now words were wrung from him. 'No, if you please, the Committee instructed me — their Chairman — to place the wreath in person — a token of our respect, you understand.'

'Oh — but do you think you'd better?'

He tipped his ear toward her, raising a surprised eyebrow.

'I've just seen a crippled child go up the street,' she said suddenly.

She thought something within him gave a startled jump, almost breaking through his smooth exterior. But he was master of his voice and eyes. 'Is that so?' he interrogated impersonally, keeping his eyes full upon her.

'The trickiest people I know always look you straight in the eye,' Ann thought. 'But he's forgotten his mouth!' That feature was out of the

picture; caught unawares, it was ashamed, angry. The color also stirred faintly in his face. Nevertheless he clutched his wreath firmly. 'I'll thank you to direct me,' he said.

Well, if he must, he must. Ann led the way down the hall. Self-important, bearing his monstrous tribute, he followed. He tiptoed out of respect to the presence of death, but his shoes cried out, calling attention to themselves all the way. 'He can't get the whole of himself into the picture,' Ann thought. All at once he seemed pathetic, human, pitifully futile in his pompous trickery, his complete confidence in the immense wreath. 'Poor fellow!' she thought. 'Even his shoes cry out, "Cheap! Cheap!"' For a flash she saw the pathos of human duplicity so vividly that it hurt.

At the door she stood aside, pushing it open for him to enter. With his squeaking shoes, his wreath, and his smug complacency, he tiptoed into the fragrance, the stillness, and the presence of death.

Suddenly Ann perceived that the key was on the outside of the door. Very softly she swung the door to, very quietly she turned the key in the lock. She glanced at her wrist watch. 'A quarter to six. Five minutes will be all he can stand,' she thought. 'All any of us can stand all uncovered, face to face with — silence.'

She went back to her post by the door, leaning her head against the frame and staring out through the curtain. The passing world still seemed remote, reflections in a mirror. The newsboys continued to romp across the way, and now an old negro woman had taken up her stand on the corner with a great basket of jonquils. The flowers made a pool of gold in the gray street. The lame boy came back down the street. The old colored woman gave him a handful of jonquils with their

green spears. He accepted them happily and hopped away out of the mirror. 'I am very tired of florists' flowers. I wish I had some jonquils for her,' Ann thought. She looked at her watch. A minute and a half gone. How long even a minute seemed if you watched it! 'All you would have to do to make time stand still would be to watch it second by second. He's very inadequate to be there all alone. I wonder if he has anything to — to cover himself up with. How could I ever have done such a thing! I could n't on any other day. To-day I'm between two worlds — not in either one. Besides, I wanted her to have another chance to explain —'

More people were coming up the steps. She opened the door, took in the cards and a box of flowers, closed it again, and added some names to her list. Three minutes gone. Only two minutes more for him now. What was he doing there with his meagre self, his cheap complacency, his wreath, faced by that complete finality? The awful beauty of that presence must burn through to his soul. But it might burn too deep — she glanced nervously at her watch. Did he have any zones of safety within himself? Any depth or reverence where he might hide? The words of the negro spiritual passed through her mind: —

I went to the rocks to hide my shame —
The rocks cried out, 'No hiding place!
There is no hiding place down here!'

'I ought not to have done it,' she thought. Was he frightened? Would he rattle the door, try to get out? Oh, no, not even Wilbur J. Boggs, Chairman, could make a disturbance in that Presence. Only half a minute more now —

But here was someone else at the door. She had to take a message upstairs, and then, returning, exchange

further whispers. 'Yes, a terrible loss to the community! From St. Andrew's at eleven to-morrow; but they want you to come to the house a few minutes before, please. Yes, I'll be sure to tell them — thank you. Yes, if you would take somebody in your car — thank you very much.' Ann closed the door, wrote 'Two seats in Mrs. Henry Armstrong's car,' and looked quickly at her watch. Ten minutes — twice as long as she had meant him to stay!

She went hastily down the hall and, unlocking the door, pushed it open. There was a slight scuffle in the room — had he been on his knees? He shot past her, coming out backward so that he almost knocked her down.

'Aw — oh! Excuse me — excuse me, lady! I did n't go to knock into you! I — I — somehow I never liked to turn my back on — you know — turn your back on — *them*. I never could — must be funny that way, I reckon.' He cleared his throat, trying to collect himself. 'The door — somehow it got locked. I could n't git out —'

He was limp, disheveled, collapsed like a pricked balloon.

'But your wreath — you have n't left it,' Ann pointed out.

He stared at it like a child with a broken toy. He had had such confidence in it, but it had completely failed him. Its perfect round was spoiled, the flowers broken. At some time in there he must have clutched it to him, perhaps for safety. He was still clutching it. He relaxed his grasp, staring at it.

'It cost a lot o' money,' he said.

'Yes, I can see it did.'

'But I could n't leave it — somehow. I'll tell the Committee. They got to send somebody else — not me.' He followed her down the hall. 'I got locked in that room. The door must 'a' got locked somehow. I — I could n't git out — could n't git away no place.'

In spite of himself his hands shook on the wreath so that the flowers shook with them. 'Dead people,' he got out, 'they make me feel — sorter funny — always did. I —' he broke off. 'I got locked in there, I tell you — all alone. I could n't git the door open — could n't git out —' His voice was getting high.

'I am sorry,' Ann said.

'I don't know what happened to that door! It was awful! I could n't git it open 'thout busting the lock. I could n't git away. And all the time — all the time *she* was there — just sort of waiting. God, it was awful! I was all alone —' He was hunting desperately through his pockets. 'Why n't the other fellers come along too?' he burst out wildly. 'Why'd they go putting it all off on me? They'd oughter been there too!' He looked at Ann accusingly. 'Why'd they pick on me?' he demanded.

She shook her head.

'Politics is a rough game!' he cried violently, forgetting and raising his voice. 'If you ladies is going to play it you got to expect — you got to —' Suddenly he turned his head aside. 'My — *mother*,' he blurted out with a great, uncouth gulp.

'Of course,' Ann told herself. 'The thought of his mother is the deepest thing in him — that would be the only real word he could find to say.'

He had found his handkerchief now and was trying to hide his emotion, keeping his face turned from her and looking about desperately for some escape. But there was no escape. He could not go upstairs — the family were there. He could not go out into the street, all undressed in his emotion as he was. And now more people were ascending the steps.

Ann touched his arm. 'There is a chair under the steps by the telephone stand — if you want to collect yourself —'

'I thank you, ma'am.' He went gratefully, his shoes apologizing and humble, his broken wreath, which he still clutched, trailing forlornly behind him. Halfway down the hall he turned and came back. 'I ain't as hard-boiled as you might think,' he said with difficulty. 'Things get to me — it's the Irish in me, I reckon.'

Ann nodded. 'I know — I understand.'

He came back again some time later. 'I was meaner 'n the rest — it was me showed 'em how,' he said.

'Yes, she knew it was you.'

'I reckon she did. She tried to tell us something, but — someway — she could n't git it across —'

'She was sorry. She felt it was her fault. She wanted to make you understand, and instead she only made you angry. You see, she was a little delirious already. She blamed herself. I think she would want you to know she was sorry.'

He turned his face aside, biting his lips. 'There was some of us laughing at her all the time.'

'Yes, she knew that, too.'

'I know what she meant now. I got it — in *there*,' he tipped his head toward the room. 'I saw it all — just how ornery and mean I was. But I got something else — that we were all up against something bigger than we realized. Life is a sight bigger proposition than we figure on. I got ahold of the idea, all right — in *there* — but — someway — I have n't got the words for it.'

'I have n't either. She called it "the nobility of life."''

He considered this for a moment. 'Yes, I guess that's about it,' he nodded. 'Well — I reckon I'll go now.'

She opened the door for him. He passed out and down the steps absently. 'Does he know he's still dragging that wreath — like the Ancient Mariner and his dead albatross?' Ann wondered.

Out in the street he appeared to hesitate, then with sudden decision crossed to the flower woman on the corner. An unexpected flash of tears came into Ann's eyes. He returned presently, bearing a simple bunch of jonquils from the old negress's basket. Even from outside Ann could hear the squeak, squeak, of his humble shoes as he came up the steps.

He hesitated for a moment when she opened the door. 'I'd like mightily for her to know I got what she was trying to say,' he said.

'It's too late for that — she's a million worlds away. All you can do is to tell yourself.'

'Yes, ma'am — that's what I am doing.' He paused a moment. 'That appropriation for paving, now — someway it kinder got away from us. I'm goin' to head it on back to the Children's Hospital — that's where it belongs, I reckon.'

Ann smiled at him. 'Don't you want me to take that wreath now? You can't go on dragging it through the streets like that.'

He handed it over gratefully. 'I thank you, ma'am.' Then he held out the jonquils. 'These is from me — just me — if she'll have 'em, please,' he said.

SUBSTITUTES

BY WILLIAMS HAYNES

APPROPOS of the artificial flowers which grace the window boxes of the Chemists' Club — a symbolism worthy of Swift — we were discussing substitutes.

Said the gloomy chemist: 'Have you observed at all critically another row of blooming artificials — our "women who work," bound, via subway, for shop and office?

'Every mother's daughter of them,' he continued, 'wears on her head a Fourteenth Street imitation of a Fifth Avenue imitation of a Paris hat, and on her feet pumps that imitate snake or lizard skin. The styles each affects are copies of expensive models designed for fine ladies in limousines, and as appropriate for her day's work as overalls on the golf course. Her furs are cat, rat, and rabbit dyed and manipulated to masquerade as seal, fox, or beaver. Her silks are rayon; her linen, cotton; her wool is chiefly shoddy — all of them improperly used to simulate the more expensive materials. Every single girl wears a neckband of synthetic pearls, a brass-plated slave bracelet, an imitation platinum wrist watch. Each has an imitation complexion and imitation curly hair. Each is reading an imitation newspaper with an imitation brain. And I submit to you, the whole outfit — clothes, jewelry, and girl — is worth, biologically and economically speaking, just \$39.98.'

'Your own borrowed plumes,' protested the cheerful chemist, 'are worth even less. You deck out a sound scientific training and hard-won industrial experience with a lot of ragtags from

Aldous Huxley, Mencken, and Havelock Ellis and parade about as one of our young intellectuals, which is quite as ridiculous as, and much more pernicious than, a shopgirl's masquerade as a débutante. Imitation ideas are a more serious matter than five-and-ten-cent-store jewelry.

'What difference can it make if these misguided girls so flagrantly display their poor taste? Their very excesses will but speed the counter-revolution of modesty and simplicity. Even their bad judgment in buying tinsel and tawdry at least puts money into circulation. Uneconomic, doubtless; but their foolish demands have built up vast industries which are the most direct and profitable stimulators of chemistry. Where would our rayon manufacturers be without their "undies" and stockings? Think of the tons of celluloid they consume as tortoise shell, lapis, ivory, coral, turquoise, amber, and what not. Coal-tar chemistry contains nothing prettier than the synthesis of aromatics to supply the market they create for cheap perfumery. Use your own brains, instead of peddling secondhand ideas; and you would be singing the praises of the flapper as the patroness of modern chemical industrialism.'

I

Some irrepressible statistician has calculated that each of us consumes seven times as much of the world's raw materials as did the Englishman of

Queen Elizabeth's time. Anyone may question such figures, but nobody can prove them false — which is, I take it, the cardinal virtue of statistics. They are, however, quite correct in that they represent vividly the tremendous lift in the scale of our daily living.

According to all reports the subjects of good Queen Bess were plucky trenchermen who doubtless 'polished off' as many foot pounds of foodstuff energy as the best of us in these concentrated and dyspeptic days; but their beef and mutton, beans and turnips, were home-grown, and even that curious and adventurous sponsor of tobacco and potatoes, Sir Walter himself, might not have grapefruit for breakfast. In annihilating time and space, by replacing the stagecoach and sailing vessel, we have increased almost pro rata our drafts upon the world's raw materials. There is an obvious, basic economic difference between power generated by the wind, which is free, or from horse fodder, which can be grown in a twelve-month, and that generated from coal or petroleum, the supplies of which are fixed and irreplaceable. By bringing bananas from Central America and pineapples from Hawaii — to say nothing of strawberries in January and fresh peas the year round — we have o'erleaped, in an economic sense, the very rigid physical limits to that quantity of food one person may eat in three hundred and sixty-five days.

No such limit restricts other human wants. For all his gaudy doublets and elaborate ruffs, Sir Philip Sidney actually owned fewer clothes than a successful merchant of Atlanta or Des Moines. An installment bungalow in a suburban development contains more plumbing than did the palace at Greenwich where the royal daughter of Henry VIII and Anne Boleyn was born. There are greater tonnage and length, and vastly more elaborate equipment, in a

score of pleasure yachts that cruise Long Island Sound than in the flagship of Sir Francis Drake, destroyer of the great Armada and Admiral of the Indies. All those worthy booksellers, printers of the first editions of Shakespeare, Spenser, Bacon, and of their brilliant, prolific contemporaries who made the golden Elizabethan Age of English literature, consumed less paper in a year than a week's issues of any one of fourscore of our larger newspapers. The paper in one Sunday's edition of the *Chicago Tribune* strips bare twenty acres of virgin spruce forest — a horrid thought that we cannot quite banish by boasting cheerfully that, for all their achievements in literature, architecture, and exploration, the Elizabethans had nothing to place in comparison with our 21,264,752 motor cars, our 74,131,085 miles of telephone and telegraph wires, our 755,418 miles of railway lines. It is to the point to add that they had no corresponding stupendous consumption of metals, rubber, fabrics, coal, gasoline, and lubricants.

From such figures a thoughtful man with a tincture of pessimism can calculate himself into a panic over the fate of the human race. Malthus did so a century and a half ago. Already our world population of close to two billions approaches the mark he set for poverty and starvation, deterioration and death. Nevertheless, we are better fed, better housed, better clothed, than Malthus's own contemporaries, and we enjoy hundreds of conveniences and luxuries of which even his brilliant mind had not dreamed.

In the United States our per capita wealth has mounted (\$624 in 1870 to \$2919 in 1922) so that, had we been content to jog along behind grandfather's old gray mare instead of rushing ahead in next year's model of a motor car we shall pay for the year

following, we should have never heard even of 'the high cost of living.' If we were but a bit more contented, we might to-day create an Elysium in which four hours a day of honest toil would provide a comfortable competency for all. The socialist jingo has a good deal of justification for pointing out that

We have the men,
We have the ships,
And we have the money, too.

But we are never satisfied. How quickly we come to consider as mere comfortable decencies the rare luxuries of yesterday! Our children will demand them as necessities; and, once they fall into that rapidly expanding class, invention has always produced them in abundant stocks.

It is upon these premises that our scientists, the most tolerant and optimistic thinkers among us, can quote these identical statistics in praise of this greedy, selfish materialism of ours. They ignore Malthus and they despise Marx. Their argument runs: If necessity is the mother of invention, ambition is its father; and with such fecund parents mankind will never lack an army of willing servants to provide all material wants. At some distant day it may even come to pass that, having satiated our material desires, we shall come to demand mental, even spiritual, satisfactions.

II

In the meantime we are passing, almost imperceptibly but swiftly, from the age of power to that of chemicals. Since the Industrial Revolution, a century and a half ago, the application of power to those complicated tools we call machines has been the dominant, the universal characteristic of the economic era. Power turned handicraft into 'factorcraft' and drove division

of labor into specialization. Power gave us trains and automobiles for stagecoaches; telephones and telegraphs for the post chaise and the pony express; the linotype for the printer's apprentice; the incandescent bulb for the tallow wick. Mass production, corporations, trade-unions, cities, all result from the use of power. Our laws, finances, the entire social structure, were changed by the Industrial Revolution, and now, before we have been able to perfect the radical readjustments it forced upon us, we stand face to face with a Chemical Revolution.

Throughout all the long centuries that man was inventing new tools and slowly improving them, he was blindly discovering curious ways of making chemicals work for him. Ages ago some cave-man genius discovered, quite by chance, that the greasy hide of a sabretoothed tiger could be more quickly and easily cleaned by rubbing it in wood ashes. By some lucky accident another found that soaking it with the bark or leaves of certain trees made the leather more durable and more water-resistant. Neither knew they were using alkalies and tannic acid. The Abnaki Indians of the New England coast made offering to the gods of bountiful harvest by planting in every corn hill a dried fish. They were actually using a highly concentrated nitrogenous fertilizer. To-day, in modern tanneries, the green hides are degreased and dehaired, cured, tanned, softened, and dyed by sloshing them about in great vats filled with different chemicals, accomplishing, in as many hours, work that cost the primitive tanner so many long days of hard physical labor. Our nitrogen we extract from the air, a cheaper, more convenient, and much more efficient fertilizer. Thus in two ways do we increase our food supply: by growing larger corn crops and by saving the cod-fish for Sunday morning breakfast.

A hundred and fifty years ago, before the Industrial Revolution, chemicals, as such, were but little used by man. Acetic acid in the form of vinegar was the most abundant, cheapest acid, and a very weak and unsatisfactory acidulating tool it was. The common alkalies were saltpetre, dug from caves; potash, which was then literally pot ashes; and alum, made by a simple chemical process brought from Arabia during the thirteenth century and long a monopoly of the Popes. Abroad the trade name of 'Roman alum' still clings to this chemical, as 'brimstone' recalls the days when sulphur was stone that burned.

Nor was there, before the mass production of power-driven factories, any great demand for chemicals in industry. Natural dyewoods, natural tanstuffs, mineral pigments, natural acids and alkalies, were sufficient for the limited output of handicraft. When flax was spun and woven by hand in a thousand cottages, it was all very well to bleach the linen by spreading it in the sunlight on the grass. When a week's output of a mill with power looms exceeded the year's work of a hundred hand-weavers, the bleachers were put to it to find space for bleach fields. In 1788 the use of chlorine was introduced by the French chemist Berthollet, and it has been estimated that to-day in England alone, during every twenty-four hours, sufficient cloth is bleached to cover all the open fields of Great Britain. The bleaching problem was solved by the use of a chemical which does its work effectively whether the sun shines or the clouds lower, in summer or winter; and it does this work better, producing whiter goods at a saving of something like sixty hours of bleaching time.

In this way chemicals have been called upon to solve hundreds of similar problems arising out of industrial development. It was perhaps not entirely a happy coincidence that the science of

chemistry was born at the time of the Industrial Revolution. Chemists had just learned to tear apart the simpler chemicals, to study their composition, to isolate the elements; and in time they learned to build up new and complex chemical compounds. To the saving of human labor, as in modern tanning; to the saving of foodstuffs, as in the fertilizer industry; to the saving of time, as in the bleaching process, chemists now add the saving of raw materials through their creative work in making chemical substitutes.

III

'Substitute' — especially 'chemical substitute' — has some nasty connotations. Yet no such stigma attaches itself to glass, although glass is a chemical product (sand, limestone, and soda ash fused together) which long ago replaced natural products — so long ago, in fact, that we do not know who discovered it, though we are certain it was manufactured in Egypt before 1500 B.C. We have forgotten that the tumbler we drink from substituted for the brass bowl of the East and the horn flagon of the North. Even our window-panes are a quite recent chemical substitute for a piece of thin-scraped parchment. Ordinarily we think of glass as neither a chemical nor a substitute. Nevertheless it is both, and it possesses those characteristics which in the future will make synthetic products invaluable to mankind.

In the first place, a chemical substitute replaces natural products, freeing them for other uses. When indigo was first made from coal tar, its introduction ruined many a prosperous indigo plantation in India. To-day those acres, once devoted to growing the dye plant, are sown to rice and millet. Every head of cattle in the United States would be slaughtered for its hide

to supply the automobile industry's demand for seat upholstery and tops if it were not for artificial leather. In such an event sirloin steak might be selling at two cents a pound, as a by-product of our tanneries; but on the other hand a pair of shoes might be costing a hundred dollars. This is fanciful economics; but it is a plain fact that artificial leather is a more suitable and lasting material for automobile use than the natural product.

In the second place, glass and the other chemical substitutes are manufactured from abundant, available raw materials, and accordingly can be produced cheaply in unlimited quantities. Varnish is a natural gum (several varieties come from Australia, India, China, and Africa) dissolved in boiled linseed oil and turpentine, both natural products. Lacquer is cellulose, the fibrous material of any plant, treated chemically and dissolved in chemicals. For twenty-five years the supply of varnish gums has been dwindling and the price advancing, while the greater the output of cellulose lacquers, the lower the price will drop.

Within a century the world's population will double. Who dares prophesy what further drafts we shall be making upon the earth's limited stock of raw materials a hundred years hence, or

how high the standards of living in China, or India, or Russia will have been raised? Plainly, we can ill afford to ignore chemical substitutes. Already we regard them in quite a different spirit from the open suspicion with which our grandfathers first greeted celluloid, vegetable lard, and aniline dyes. Our own grandchildren will doubtless accept rayon and lacquers, as we do glass and paper, without conscious appreciation that they are chemical products.

Even these very new chemical goods, so long as they do not masquerade as something richer or rarer than themselves, and make no attempt to trick our palates or our pocketbooks, are given at least a fair test. They cannot compete with luxuries, since their very economic purpose is to become cheap and plentiful; and glass mounted as a diamond, or paper in the sole of a shoe, deserves contemptuous exposure. For there is a misuse of chemical substitutes just as there has been sophistication of natural materials. But, properly used to save human effort, to save time, and especially to conserve our dwindling stocks of natural goods, these chemical products are, and increasingly will be, one of the best material blessings of our chemical age in industry.

THE LIMITS OF AVIATION

BY LIEUTENANT COMMANDER BRUCE G. LEIGHTON

I

OUT of all the mass of conflicting testimony that has appeared in the acres of newsprint that have been devoted to discussion of the significance of recent transoceanic flights, one fact stands clear and beyond dispute: the airplane has become an important element in the transportation systems of the world and in the armed forces of nations. It is undeniably destined to take a place of even greater importance in the future.

But how? And to what extent? Are we on the verge of regular transoceanic passenger and mail service by airplane? May we expect in a 'next war' to be subjected to bomb raids by enemy planes flying across the ocean?

Notwithstanding the exploits of Lindbergh and those who have followed him across the sea, consideration of the inescapable physical laws governing mechanical flight leads inevitably to a negative answer to the latter questions. The future of the airplane, both in peace and in war, lies in pursuits other than transoceanic transportation or other independent long-range operations.

Here are the reasons: —

The possible performance of an airplane is written almost entirely in the three words: pounds per horsepower. Everyone knows that an airplane depends for its support entirely upon the continuing output of power from the engine; when the engine stops the airplane must descend. It is clearly evident to everyone that a big airplane

requires more power to keep it going than does a little one; that there must be some limit to the total weight which can be supported and propelled by the power of a given engine. Certainly we cannot hope to carry an infinite weight with zero power — stones don't float in air.

The airplane, to justify its existence, must have high speed. The airplane builder and operator has learned as the result of a quarter century of experience that in practical service one horsepower will support and propel at reasonably high speed a maximum gross weight of about twenty-five pounds. One horsepower, twenty-five pounds; one hundred horsepower, twenty-five hundred pounds; and so on. This total weight must include the weight of the airplane structure, the engine and propeller which drive it, the fuel, freight, passengers — everything. Greater loads can be and have been carried, but always at prohibitive cost in respect of speed, controllability, and safety. A practical airplane, to use a common technical term, will not fly safely if the 'power loading' exceeds twenty-five pounds.

With this limitation in mind, it will be apparent that an attempt to build an airplane around an engine whose weight is twenty-five pounds for each horsepower that it develops is foredoomed to failure, because the whole weight allowance must be allotted to the engine, and nothing would remain

for wings or for fuel to run the engine. No wings, no flight. The only possible way to provide wings and fuel, and still remain within the limiting total weight, is to reduce the weight of the engine. Every pound that is taken from the engine is a pound that may be allotted first to the construction of wings and to enough fuel for a short flight, and later to useful carrying capacity as development progresses.

Someone has truly said, 'An airplane is merely a light engine with wings on it; the lighter the engine, the better the airplane.' Mechanical flight as an idea is as old as man; stories of attempts to accomplish it date back into ancient mythology. The basic principles involved have been well understood for centuries; Leonardo da Vinci, who died in 1519, left behind him not only the famous Mona Lisa but also a number of crude mechanical sketches which showed a remarkably clear understanding of the principles of mechanical flight. Many other investigators studied the problem for centuries before the first flight was actually made, but all came to the same inevitable conclusion — that realization of mechanical flight must wait until engineering development had produced a light power plant.

The development of light internal combustion engines is the foundation on which has been built the entire structure of the modern airplane. The first internal combustion engine ever built — some seventy-five years ago — weighed more than five hundred pounds per horsepower. It took fifty years, and the tremendous impetus given by the appearance of the automobile, to reduce this weight, until in 1900 the lightest engines weighed about twenty-five pounds per horsepower. This weight was still too great to permit of successful mechanical flight.

In 1903 the Wright brothers were able to construct an engine of their

own design which weighed about thirteen pounds per horsepower. At this point the age-old bar to mechanical flight was let down; the Wright brothers were able to build an airplane which would just barely fly. It is no disparagement of the splendid work they did to say that, had they conducted their gliding experiments five years earlier than they did, they would at that time have been scarcely more successful in their attempts at mechanical flight than were the many earlier investigators who preceded them. Mechanical flight required a light power plant. It was destined inevitably to come when — it could not come before — light power plants appeared.

Engine development has been by no means the only factor in airplane development, — wing and body construction has kept pace, — but the engine has been undeniably the *controlling* factor. Every outstanding advance in airplane performance, since and including the first flight, has followed upon advance in light engine construction.

Starting with an airplane which will just barely fly, — with such an airplane as the Wright brothers used in their first flights in 1903, — if we reduce the engine weight we can add an equal weight to the 'useful' load — passengers, freight, additional fuel for the engine, whatever we will. If we would add weight in one place we must first take out an equal weight somewhere else. The more freight or passengers we carry, the less fuel; the more fuel, the less freight. If we are looking for extreme distance flights (New York to Paris, for example) we must provide the maximum amount of fuel possible, and therefore eliminate passengers, freight, and nonessential equipment. We may skimp structural weight and thereby add to the useful carrying capacity, but if we go too far in that

direction there is danger that the structure will fail. We may elect, as we save weight in engine and structure, to keep the power loading low and to use the reserve power to provide greater speed, quicker take-off, better manoeuvrability, faster climb.

It is all a compromise. If we stress one characteristic we must subordinate others. We can have extreme high speed in one airplane, long range in another, great freight-carrying capacity in another, slow landing speed and quick take-off in another. But we cannot have all these characteristics in one airplane. Power loading — pounds per horsepower — is the criterion in all.

The size of the airplane makes no difference in respect of possible power loading. Big planes, little planes, middle-sized planes — all are subject to the same limitation; all must keep within the same limiting figure of about twenty-five pounds per horsepower. Within that limitation we may proportion the weights as we see fit; if we exceed it, the probabilities are that the airplane cannot lift itself from the ground; or, if it does, its flying characteristics are so poor that there is great difficulty in retaining control, and grave danger to the passengers. Lindbergh's plane weighed 23.6 pounds per horsepower; Chamberlin's 24.5; Byrd's (which was three times as large and had three times the power) 22.5. They were all dangerously close to the limit; all had great difficulty in taking off. The tragic end of Lieutenant Commander Davis's preparations for transatlantic flight came in a plane which was loaded to just under twenty-five pounds per horsepower. Safety demands lighter power loading. Our modern commercial weight carriers and military bombers all have a power loading of well under twenty pounds. Higher speed demands still lighter power loading: our fast military combat

planes weigh about seven pounds per horsepower; world-record racers, five pounds or less.

No clearer or more concise explanation of the developments of the past, or of the probabilities of the future, can be given than by an engineering comparison between the power-plant weights of the first airplane to fly, in 1903, and the airplane in which Lindbergh crossed the Atlantic in 1927. Each machine carried one man. Each was loaded to its maximum total capacity. Neither carried any disposable load other than fuel and oil for the engine. The Wrights' machine had a range of a few hundred yards; Lindbergh's, a range of nearly four thousand miles. In the Wrights' the fuel carried was necessarily, due to the engine weight, a negligible part of the total weight of the airplane; in Lindbergh's the fuel comprised more than half the total weight.

Now compare the distribution of the total power-plant weights (including engine, fuel, and oil) in the two machines.

	WRIGHT BROTHERS' 1903	LIND- BERGH'S 1927
Total weight of power plant, including fuel and oil	175	3400
Total horsepower	12	225
Pounds per horsepower of total power plant	14.6	15
Pounds per horsepower for bare engine	13	2.5
Pounds per horsepower for fuel and oil — 'useful load'	1.6	12.5

The pounds per horsepower of the total power plant, including fuel and oil, are practically the same for both machines, but the *distribution* of that weight, as between bare engine and fuel, is changed enormously. It is that difference in distribution — the conversion of eleven pounds dead engine

weight into eleven pounds of useful carrying capacity — that is primarily responsible for Lindbergh's success.

For all the advance in knowledge of aeronautical engineering, *there has been no increase in total weight carried per unit of power.* The Wrights' first machine had a power loading in the neighborhood of fifty pounds, but it was not in the modern sense a practicable airplane; its maximum speed was less than thirty miles per hour; it required special launching devices to put it in flight; its possible climb was less than the height of a modern office building, its structure far from rugged, its manœuvrability near the vanishing point. The trend has been definitely downward in respect of power loading, rather than upward. This is natural, because improvement in speed, rate of climb, manœuvrability, safety, — in everything but extreme carrying capacity, — comes with decrease in power loading.

The explanation of the development in airplane performance and utility is not difficult to understand. Engineers have been taking dead weights out of engines and making available thereby an equal weight for 'useful' carrying capacity — available for fuel if one would break endurance records, for freight or mail or passengers if one is willing to dispense with a part of the fuel and accept a shorter cruising range. The saving of about eleven pounds per horsepower in engine weights, coupled with corresponding improvement in structures to take advantage of it, has been translated into increase in cruising range, increase in speed, increase in climbing ability, increase in utility, increase in safety.

Reduction in engine weights has been the predominating influence in improvement in airplane performance. We may expect no startling advance in performance in the future because we are now approaching the ultimate limit

in respect of weight reduction. Engines now operating in service types of planes, both military and commercial, weigh in some instances less than one and one half pounds per horsepower. Certainly they can never be reduced to zero weight. But even if they could be reduced to zero, the gain in possible performance would not be startling. Lindbergh carried twenty-seven hundred pounds of fuel; his engine weighed five hundred pounds. A weightless engine would have permitted him to add five hundred pounds — about eighty-three gallons — to his fuel weight, and would have increased his cruising range by something less than twenty per cent.

We may expect some further reduction in engine weights, some improvement in fuel economy, refinements in wing and body construction which will enable us to use the engine power more efficiently. But these advances will come so slowly as to be scarcely perceptible to the casual observer, except perhaps as some new long-distance record is established. We shall never reach the ultimate limit, of course, but we are approaching it; and as we approach it the rate of progress becomes ever less rapid.

The Pacific Ocean will be spanned, as the Atlantic has been. The airline distance between Honolulu and Tokyo is almost exactly equal to the distance from New York to Berlin. Chamberlin has flown within a few miles of that distance; a handbag full of additional gasoline would have taken him all the way. Lindbergh had enough fuel left on arrival at Paris to take him on to Berlin without landing.

There are no halfway measures in transoceanic flights. They are either completely successful or complete failures. The difference between glorious success and tragic failure is very small indeed; measured in terms of airplane

performance it may be almost negligible. When the barrier is finally broken down success comes with such startling suddenness that one is very likely to conclude that some new invention or some revolutionary advance in the art of airplane building has suddenly come to light. We are prone to forget, if indeed we ever knew, that Lindbergh's plane was an adaptation of a similar type which has been in continuous operation for a long time in regular passenger-carrying service in California; to forget that Chamberlin's plane was actually built some three years ago, and has been in intermittent flight service since that time; to forget that the Wright Whirlwind engine used in all the transoceanic flights was designed seven years ago, and has for at least four years, in substantially its present form, been in continuous operation in naval planes which have operated from Iceland to the South Sea Islands; to forget that Kelly and Macready made a nonstop flight cross-continent in 1924, covering a distance greater than from San Francisco to Honolulu; to forget that a German airplane in 1914 remained in the air without refueling for twenty-four hours.

There have been great strides in reliability and safety, and in adaptation to utilitarian purposes. But there has been no startling increase in possible performance during the past few years; there is no likelihood that there will be in the years to come.

II

But what of the 'giant' airplane? We have read much in the daily newspapers of huge air liners of the future. Big steamers can handle ocean freight and passengers far more efficiently than can little ones; the experience of centuries has taught us to accept as a matter of course, in practically all forms of

transportation, that efficiency goes with large size. What more natural than that we should look forward to the development of larger and still larger airplanes, with ever-increasing efficiency as a result?

Unfortunately the old rule fails us when it comes to airplanes, because the method of support is entirely different from that of any other known vehicle. All other forms of vehicles, including the dirigible, are supported by static forces. They are supported equally well whether they are at rest or in motion. Their propelling plants are entirely independent of the support, and the fuel carried is *all* available for driving them forward. Ships ranged the seas before ever an engine was heard of; but the airplane immediately ceases to be an airplane when its engine stops.

Our grammar-school physics tells us that every floating body is buoyed up by a force equal to the weight of the liquid which it displaces. The volume of any body increases as the cube of the dimensions. If we double the dimensions of a cubical box the volume becomes eight times as great, and therefore it will float eight times as much weight; but the weight of the box does not increase anywhere near so fast as does its contained volume. It is the story of the dry-goods box; less lumber is needed to enclose material in one big box than to enclose the same material in a lot of little boxes. In floating vessels, therefore, we can carry proportionately far more useful weight in large vessels than in small ones. And so with the surface ship, the submarine, the balloon, the dirigible airship, or the dry-goods box: when we want to increase the proportion of the total weight that can be allotted to useful pay load, or, if ships are self-propelled, to increase the distance they can go without refueling, all we have to do is to build the vessels larger. That is why

we have enormous passenger ships like the Leviathan. That is why we can carry sixteen-inch armor on big battleships when we must be content with thin side plating in destroyers. That is why rigid airships increase in effectiveness as the size is increased. 'Bigger and better' is a fine slogan for displacement ships.

We have an entirely different story with the airplane. It does n't float in the air, any more than the skipping stone which you shy along the surface of the water floats on the water. The airplane is an *airplane*; the stone is (so long as it keeps moving) a *hydroplane*. Both depend entirely for their support upon their continued *movement* — with relation to the air in the one case; with relation to the water in the other case. In both cases it is the *area* of the *surface* in contact that counts. The *volume* has nothing to do with the supporting force or with the total carrying capacity. If we double the area we double the total supporting force and the total carrying capacity; but at the same time we double the weight of the structure, double the resistance to forward motion, and hence double the effort required to keep it moving; and when, as in the airplane, the driving effort is supplied by an engine, there is required twice as powerful an engine, and twice as much fuel to go a given distance. The weight of structure, carrying capacity, and power and fuel required, all increase in exactly the same proportion as the size increases.

Generally speaking, then, and contrary to the rule which applies to *floating* vessels, small airplanes are just as efficient as are large ones. There is no advantage in great size. A small airplane can fly as far as a large one; two small airplanes can carry as much useful load as can one large one of double the size. It is not just an accident that the world's records to-day for the

longest sustained flight, the greatest nonstop distance, and the highest sustained speed for all distances from one mile to nearly four thousand miles, stand to the credit of airplanes of moderate or small size.

Byrd had three engines of exactly the same model as Chamberlin's one, exactly three times the total power, and approximately three times the wing area. His plane weighed just a little less than three times as much as Chamberlin's. He had no longer cruising range, he carried proportionately no greater useful load. Chamberlin's one engine carried two men across the ocean; Byrd's three engines carried four. Both were loaded to the very limit of safety.

There is one advantage which larger machines have over smaller ones — that within reasonable limits no larger flying crew is necessary for large machines than for small ones. For example, Lindbergh flew the Spirit of St. Louis alone. Conceivably Byrd might have flown alone, and have translated his 'crew' into 'passengers.' It is rather doubtful, however, if any pilot would care to make a regular practice of flying under such conditions.

But there is a limit even to this advantage. It is a demonstrated fact that, as size is increased, a point is reached, somewhere in the neighborhood of eighteen thousand pounds (Byrd's plane weighed a little more than fourteen thousand pounds), beyond which it becomes necessary to allot a proportionately greater part of the gross weight to wing and body structure, and a correspondingly smaller part to useful load, than is necessary in the smaller types. The explanation of this involves a somewhat complicated technical discussion of the principles of structural design somewhat analogous to those involved in cantilever bridge construction — a discussion which has no place

here. Suffice it to say that attempts to build airplanes considerably in excess of about eighteen thousand pounds necessarily result in decrease in efficiency.

There is no advantage in great size. This is the dictum of the engineer, this the evidence of actual performance, this invariably the lesson which has been learned in the many attempts that have been made in all countries in the world to construct giant airplanes. Byrd's plane is often spoken of as a giant plane. In reality it is not a giant at all. The NC-4 which made the transatlantic flight via the Azores eight years ago was more than twice the size of Byrd's plane. The army's Barling bomber was three times the size of Byrd's plane. None of these huge types has persisted.

The trend of development in recent years has been downward in size rather than upward. There is no reason to believe that the airplane of the future will be of great size. The 'bigger and better' complex is so strong that efforts to build giant airplanes will doubtless persist for years to come, but we have probably seen about as large airplanes as we shall ever see in commonplace operation.

The trend of airplane development, then, is toward greater reliability, dependability, safety; toward more general application to useful commonplace service, greater production, and marked decrease in cost of construction, operation, and maintenance. There will be slow and steady improvement in possible range, in maximum speed, in possible time of sustained flight, to be sure; but we need look forward to no very startling gain in any of these. Because of the great proportion of the total carrying capacity required for fuel in long flights, the airplane, as applied to practical carrying purposes, is to-day, and must inevitably remain, essentially a short-range vehicle. Its

forte is high speed and unprecedented freedom of movement; its weakness, relatively limited range of independent operation.

Transatlantic flight by airplane is undoubtedly practicable in favorable conditions, just as nonstop transcontinental passage by motor bus is practicable. But that does not indicate that either is likely to become a commonplace commercial venture or military operation. A motor bus in a transcontinental passage will consume nearly two tons — or six hundred gallons — of fuel. No one can deny that a motor bus can successfully make a non-stop passage across the continent without refueling along the way; but can anyone picture as a paying commercial venture a bus line which must sacrifice enough passenger space to accommodate twelve fifty-gallon gasoline drums, or one hundred and twenty five-gallon gasoline tins, or eliminate the weight of some twenty passengers and their baggage? Would you invest your money in such a project?

The airplane must have frequent refueling and service stations along its route, just as automobiles must have them. These do not exist at sea; they cannot be provided or maintained except at prohibitive cost, if at all.

One does not say that regular transoceanic airplane service will never come, — it is a rash man who says that *any* thing will *never* come, — but it cannot and will not come until there is far more advance in the field of aeronautics than now exists or is remotely in view to-day.

III

What, then, have the recent transoceanic flights proved? They have probably done more to advance the cause of aeronautics, both commercial and military, in this country, than any other one series of events could possibly

have done. Aeronautics has been developing rapidly under the surface. It has long since reached a point where it is ready to take the people of the country on its back with safety and assurance from one end of the country to the other at tremendous speed.

Our lack of commercial passenger lines in this country is not due to lack of excellence in flying equipment. Our airplanes are just as efficient, just as safe, as any in the world. Our engineers and pilots are just as good. No foreign airplane or pilot has surpassed the feats of Lindbergh, Byrd, Chamberlin, or Maitland. A very fair share of world-record performances stands to the credit of American airplanes. We have excellent airplanes, peerless flyers, lighted airways, frequent landing fields, well-equipped service stations throughout the country. All the ground-work in its necessary elements is laid for air transportation from anywhere to anywhere in the land. All that we have needed is the passengers to ride; the income from their fares to pay running expenses, to perfect existing facilities, to provide new facilities where they do not now exist. And all that is necessary to get passengers is to convince them that air transport is safe and dependable. It needed men with daring and unbounded confidence to perform some startling exploit which would arouse popular enthusiasm, focus the attention of the whole country on the things which have been under our very noses for years if we would but use them.

These men who have faced the perils of the Atlantic and Pacific are the kind of men who are flying your mails across the country every day and every night of the year; the kind of men who are ready at your service to carry you wherever and whenever you wish to go. They will take you in planes which are conservatively loaded, which need no special runways to take off, over well-lighted and regularly established airways, with accurate weather information for the path ahead always at hand, with marked and lighted landing fields every few miles, and competent service men distributed all along the route. They are propelled by engines which have plugged on unfaltering for dozens of hours over the Atlantic and Pacific, through fog, rain, and sleet, day and night, good weather and bad. Need you have any fear to fly with such pilots and such equipment? Many are ready to serve you now. Many more will spring to your service when you indicate your desire to ride, your willingness to pay a reasonable fare.

When you have come, as you doubtless will — and soon — to taking passage by air with as little thought of the consequences as you now have when taking the regular express train, you may look back and thank these men for bringing this service to your attention. Theirs has been the 'punch' which has been necessary to bring to the public consciousness the fact that the airplane in the field of public utilities has come to stay.

ROUGHING IT IN THE TROPICS

BY MARK BARR

I

ONE day in my youth I stood on the six-hundredth rung of a twelve-hundred-foot ladder. And looking up from the deep shaft I could see the stars at noon. I was to climb this ladder many times, clad in a sort of Burberry (against the dripping hæmatite water), stringing great lengths of electric cable by candlelight. But that was in the temperate zone of upper Michigan, and, had it not been for the fact that several other undergraduates were on the same job, I might have felt the full dramatic quality of my experience. Pride, and the will to feel as well as to exhibit coolness, eclipsed our fears.

Some years later in London — still in my youth — I discovered that my adventure in the red Gogebic Range could never appear heroic. Not that I wished it so, but I was struck by a remark of Stephen Crane's when he said that, unless one feels in the actual moment of one's action a dramatic quality, the incident will forever remain commonplace. Now, when I look back through my present dislike of height, I imagine that it was indeed horrifying to have climbed that ladder. For I transform the youthful, slightly sick feeling of caution into the white fear I should know to-day. And yet at the time it was not a stirring experience.

But what of adventure in the Tropical Zone? If your own life north of the equator has been as normal as mine, you will agree that the tropic forests

loom up full of terrors: a hundred stinging insects darting through the jungle for every one of our New York gnats; tarantulas springing upon one; outlandish plants with razor-leaf edges; serpents; miasmic threats of disease.

So, when I set sail for the West Indies with Will Beebe, his smiling disapproval of my excited outlook did not allay my sense of heroics. I felt like the one undergraduate who had not climbed the red ladder — though we had laughed at him and said it was nothing. I was to see tarantulas at home and walk in a jungle choked with orchids.

At Christmas time we left New York, bumping through blocks of ice in the river and shivering all night in worse and worse winter although we were headed south. But three days later we were counting the flying fish and admiring the gold sargasso weed in the bluest water of all the seas. As yet there were no tarantulas, and I was grateful for a gentle induction into jeopardous adventure.

We had a sight, far off, of San Salvador, but we saw little land as we made for the Windward Passage through the Greater Antilles. And when we sailed into the bay of Haiti I was disappointed to see so little of the tropic flora. My absurd anticipations had outrun all reasonable limits of vision.

But the colors of the sky and distant crumpled hills! Concept serves us

very ill when we imagine that mere degree will give us a clue to new appearances. The water and the sky were not simply bluer than the hues I had known — they were novel with an effect beyond that of clarity and heightened tone. The sea, of *Salvia patens* blue, moved in rounded wavelets with no cusps; and from the curved facets oddly colored high-lights shone — lavender, rose, and white.

The moment we landed we were shown into the General's private launch for a streak down the rim of the bay, and into his motor car for the run up to his beautiful place in the hills. Along the lanes I saw scarlet Poinsettia and red Hibiscus growing wild; two kinds of Hibiscus later, red and peachblow; two kinds of Bougainvillea; the lavender Petrea, deep-hued morning-glories, and rose-colored Liane d'Amour embracing the stony-hearted cactus; royal palms of great height, and the trees called Flamboyant.

The General and his wife received us on a terrace which might have been one of the colonial verandahs of Virginia or Lady Varley's house on Camden Hill in London — except for the flower garden and the magical breeze and the view below of Gonaïves Gulf, now in turquoise, alkanet, mother-of-pearl. I can think of nothing more certain to overwhelm one with delight than a dinner party at the General's, where one gets everything both ways — all the kindness and wit and humor of Northern culture set in the best of tropical heavens. I was told about the sights to see; the strange natives and voodoo and the jungle. The answers to all my questions brought surprise. 'That is a bread-fruit tree. This is native mahogany; and by the way, you will have mahogany honey for breakfast. And you will enjoy our walk to-morrow along a native trail in the jungle.'

No mention yet of tarantulas.

True, I slept under a mosquito net tucked around by kindly Enrico. True, I was told that the big cool brook-water *bazin* would be ready for me at seven; that breakfast (with mahogany honey) would be served at eight — the General pouring our coffee. But, temporarily safe in bed, when I faintly heard the voodoo songs and tom-tom beats far over the jungle glades, and near by the thump of mangoes ripening in the very night, I was thrilled with ominous thoughts: how I should have to sidestep, on the morrow's excursion, velvety tarantulas, not to say malarial mosquitoes, voodoo charms, and razor-blade plants.

But the modern high-powered automobile, chauffeur to a turn, and the modern facilities, electric ice, thermos flasks, cigarette lighters worked by the metal lanthanum instead of flint — these comforts, as we rode to the edge of the forest, knocked out my sense of roughing it. I do say, though, that when we trailed through the jungle glade with Will Beebe leading, — hawk-eyed, seeing all twenty seconds ahead of us in time and twenty yards ahead in space, — I do say it was hard going for me. But the General's wife took the uneven paths like a gazelle. She made us laugh; she made us go on; and incidentally she made us think that the Hibiscus and Liane d'Amour were, not exactly dull flowers (*she* called them divine), but certainly mere side decorations as she serenely, on the jungle trail, entertained us.

There was nothing she did not know about the Haitian woods, and I observed more than my unguided eyes would have taken in. The overwhelming sensation was to see trees and vines green and flowered, as I guessed, twelve months in the year and showing so little sign of their relation to the trees I know.

It was not the orchid season, but I saw many. I had thought that orchids were too much like animals: there had been something weird and almost suggestive of a satanic trap when I saw them in England — so out of place. But here the trees seemed pleased to have them clinging; they were as welcome as the perching birds. And thus the delicate orchids won my heart for the first time, now set out in their own way. The scene was pleasing, not sinister.

II

The sense of the forest, the spirit of it, is known to many of us — the spirit of the Northern wood. What is the spirit of a tropical forest? I remember one night at a country-house party in England when we were analyzing our feelings in regard to the surrounding wood. I said the forest near by was not alive, and the hostess exclaimed, 'Trees not alive? How can you say that?' and Algernon Blackwood shouted, 'Thank you, Moro; I have been contending that this wood is dead. There are no hamadryads here.' We were accused of mystification!

There is in the Northern wood, when it is right, the sense of a hushed temple — I can put it no more clearly. But in the jungle forest this is not so. There come into my mind all sorts of far-fetched analogies when I try to convey the idea. I think of the visit of an Athenian poet, a little later than the Golden Age, to the palace of Cræsus across the Ægean; and I wonder at the scene when the quiet, philosophic Athenian entered the room and was greeted by the mighty Lydians! And the entertainment, the rich-colored setting, and the pleased and flattered but somewhat disturbed, cool-tempered visitor.

Here in Haiti was a forest silent enough, but it was not the silence of a

temple. Here was beauty, but the beholder was too much stirred; and as I looked I seemed to understand, all at once, why men had so often devised religions based on asceticism: as if beauty, full tilt, at its height, were dangerous! I am not able to believe that the moral judgment has had any success when it has touched upon the perception of beauty. And yet . . .

In the forest clearings we came upon natives in their hovels set in groves of cultivated banana trees, and plantations of exotic vegetables never served at the Savoy or at Childs'. The natives are gentle, pleasant people and we were told to say, 'Bonjour, madame' (we are told in England to say 'ma'am' to the Queen) and the black wives smilingly replied, 'Prends courage, cousin.'

My ideas of negroes were put awry by the clear articulation in French patois, so different from one's idea of what African lips must do. Along the roads outside we met these black women riding burros on a day's journey to the market in Port-au-Prince. Here they were dressed for Sunday with bright bandannas covered by broad straw hats. And on their feet heelless slippers hanging perilously on the big toes but never falling. Haitian *chic*! I offered to buy the sixty-five cents' worth of merchandise, but was told that two dollars would not be accepted so far from the market. Tomorrow's gossip and bickering at Port-au-Prince give the maximum profit. The black wives are independent and occupy no inferior position; and one might possibly see them ruling chalk lines for their lazy husbands.

Sounds of a violent domestic quarrel in the deep glade below reached us while we lunched on the ridge, and the one epithet was 'Ou-mim!' — which is patois for 'Vous-mêmes.' But in a few minutes all was silent and peaceful. The strange trees made a cool

shade from which no tarantula dropped upon us.

The natives are the descendants of African slaves imported in the eighteenth century to relieve the cruelty to the Caribs, whose serfdom shocked the conscience of a tender-hearted priest. But more than a hundred years of freedom won when Napoleon was not at his best — and he was ever vague upon questions of overseas control — has given little to the Haitian. 'Tis a sad country. The calm negroes move in the scene knowing nothing of snow or white reason. They strive ever toward yesterdays, and it is well not to probe too deeply into their manners. Though they have a great palace for their President (by the way, he is a very learned and exceptional man) and a Palace of Finance with the Haitian flag flying blue and red, — the French white torn out, — a half-dozen laborers lapped from the gutter a bottle of yellow chartreuse which slipped from my arm the other day.

III

Until the expeditionary schooner came in we stopped at the General's house, and the soothing run of my introduction to life at 18° N. continued to make philosophy redundant. Our conversation on the terrace ranged over all tropical countries, and my interest in hot lands increased as the General told me of many colored peoples and their customs and governments. The horror of voodoo human sacrifice is no more — an improvement on the year 1864, when a mother, on being asked how she could bring herself to kill her own child for voodoo cannibalistic sacrifice, replied brightly, 'Who has a better right?'

From the General's terrace we watched the horizon of Gonaïves Gulf for the coming of Will Beebe's floating

laboratory. This was the four-masted schooner *Lieutenant*, sailing from New York on December 31, 1926. The strange cargo of scientific apparatus and khaki tents, in which we were to work and live on deck, made a burden far below the normal nine hundred tons, and we knew that the beautiful vessel would ride high in the water.

The schooner carried no auxiliary engine, and her arrival was a question of fitful winds even before she was off San Salvador. She was compelled to make Easting; and at last, after twenty-one days out of New York, she came into view rimming westward the coast of San Domingo. We had a sweepstake for the date of arrival, and Dr. Jamieson won it when the *Lieutenant* sailed down the bay with John Tee-Van at the wheel. I marveled at John's sea-dog verve, for I had thought that an ichthyologist would know nothing of navigation. But the vessel had been brought down by Will Beebe's group of clever assistants, under the command of her skipper.

We were all tanned and acclimated. Will and Jamieson and I had not spent our entire month on the General's shaded terrace, and certainly the ichthyological crew had known exposure. We began at once to fit up our laboratory, rejoicing in the heavy toil. The skipper, I think, looked on with disapproving eye, amused and cynical, as we put up the khaki tents on deck: the big library and work tent, with its microscopes and forceps and trays, its tables and seal jars and slide rules; the big mess tent, with its dining table made by Merriam then and there, with long benches at the sides; and our sleeping tents, our carpenter bench, and the pet monkey's ample cage — dearest Cheery, the darling spawn of Satan. Serge, our Russian refugee *Préparateur* (of whom a poignant and arresting and then a delightful history can be told),

remarked: 'Oh, much work; plenty carpenter; no *glace*.' Ice! That is what Merriam and I were expected to produce. And we did, eventually, when the dynamo was fitted and the methyl chloride gas began to run its expanding and contracting cycle in the great refrigerator. *That* job was done. And from that day we had a great supply of two-inch cubes of ice. Over all tents and the ice box we stretched great canvas flies, and around the refrigerator we packed five inches of kapok fibre. Tables and benches, aquarium stands and shelves on deck and below in the hold — these went up fast under our army-ant efforts.

The work was chiefly sea work and at sea we were anchored. We had no mosquitoes, no land pests of any kind; and twice a day a cool sea breeze. At ten that first night we slept, each on his own cot in his own tent. A good job done. The régime, never broken during four months, was as follows: —

Up at 6.30. Into the sea.

Work (of which, details presently).

11.40. Into the sea. Lunch at 12.

Work.

4.20. Into the sea.

4.50. The first and only drink: iced rum punch.

At 5, dinner and perhaps a half hour's recreation.

Work, and to bed at 10.

Recreation is a stupid word in many contexts. If it merely suggests idle fun it has little meaning in laboratory work; for when I look back over thirty-five years, and think of the breathless joy of research, golf is nothing at all. And there is no quickening change of occupation quite so thrilling as the next and the next moment in analytic observation. We labored joyously, we had one drink of rum, and we rested in black velvet slumber.

We were anxious to repeat Will Beebe's use of a bright light in the

sea, and very soon after sundown we lowered into the water our powerful electric projector. The jellyfish bothered us, being plankton, a name which hints that they have no will of their own. In the spread of the beam, which made a celadon-green fan of jeweled light, hundreds of jellyfish phototropically moved to make a sort of glass log-jam and clogged our field. But it was not always so, and many fish and other quick-swimming creatures came from their beds to see the lamp. Dozens were collected and studied.

There are some species which cannot be caught by any hook or net or trap. These are fish not seen near the surface, and it is necessary to study their habits by going down in a diving helmet.

IV

A walk on the sea floor is an experience never forgotten. You see many a gem in the caves of the ocean, and if the poet Gray had left Stoke Poges for the Greater Antilles, to know these beauties first hand, he would, like Bates, have tarried long out of England.

You wear a heavy-windowed helmet, fitted at the end of a long hose pipe, and you go down a ladder off the stern of the boat while a trusty friend pumps the air. All of a sudden you are weightless and the dearest dreams of dance and grace come true. You are in the enchanted garden of Rasselas. You move as a Nijinsky, remembering his *Spectre de la Rose*, for to step over a three-foot piece of coral is no effort. Oddly enough, under the hypnosis of your outlandish adventure, the magic world becomes strangely, faintly normal. That is to say, you begin to remember the scene, to imagine you have been there before. For you have known it all in your dreams.

The atmosphere (so it seems, for there

is no sense of water; one is not wet) is of a transparent faint celadon green, and distances appear abnormal. Valleys stretch out and tempt one to wander.

On some of the reef floors it is impossible to walk on account of closely massed jagged coral, which stands up still and gaunt like frozen plants. But we found one reef with alleyways of snow-white sand. And here was a long-fringed moss of Chinese camellia-leaf powder-green, above which waved red-purple fronds of miracle lace.

Sponges are colored! I had thought they were all of light gray-yellow, but in the sea garden where they grow they show the hues of *famille verte*. But alas, the color washes out above, in the fresh-water world. One cannot rob the gems of ocean with profit. And surely we know this, for what have we ever brought back from the land of dreams?

Rock gardens at home show broken stones, but on the sea floor rocks are unsplit spheroids of coral with labyrinthine designs upon them. I saw three lilies growing on one of these boulders, their silken corollas crimped and scalloped to show captivating changes in color. One was scarlet, one was like a yellow picotee, and one was pale sky blue. I wished to pick one, but zip! it vanished — as things do in dreams.

These might be *Hemerocallis euleipioeis* — a dog-Greek name I have invented for them, the botany game being played in this way, I believe. But Will Beebe has the right official name, which does not do them justice, though I know now that they are benthic animals.

Fish swim about you unafraid, and the one most often seen was half pure blue and half lemon yellow. The colors and designs are uninventable, and I have seen feats of camouflage that put the chameleon in the shade. We all know that black is not black in usual environment, and that a dark-lined

cavern like the pupil of the eye is blacker than any surface pigment. Yet there is one fish (his eye is all pupil, of course) which has a black pigmentary band across him and across his eye equal exactly in width to the eye diameter; and the pigment is of such velvet blackness that the eye is not seen. Is this enough in the way of disguise? No! Far from his head there is an imitation of a bright eye like those on butterfly wings!

And there was a rare fish, never seen near the surface, which Beebe captured only after two weeks' study of its habits *in situ*. It had a mantle of Tyrian purple so bright that we could find no paint to match it. And so it goes; I won't attempt further to convey the detailed wonders.

I do not speak loosely when I mention dreams and refer to the sense of haunting memory. I have not forgotten Plato's charming suggestion that our perception of beauty is a primordial recollection. And he said that wisdom (or was it knowledge?) is a memory! William James, also, has had much to say on the incidence of a memory sense in very odd mental experiences. The first green of spring always stirs in me the exquisite wraith of age-old memory, and in the sea garden I felt again that strange inexpressible emotion.

I have discussed this with my friend Alfred Whitehead, who has some illuminating philosophic things to say about it. I agree with him that the physiologist's definition of memory will not bear analysis and that an apparent sense of recollection, when the facts of memory are nonexistent, is something to conjure with. Who knows the truth wrapped in this great mystery? Who can contemplate space-time, with its infinite miracle of past and present?

Conscience-stricken at last, on giving a stray thought to your pumping

friend, you go up the ladder and the impatient gods above lift off the helmet. You are again in the white air and you notice on all light objects a pinkish hue. This is because you have tired out the Nankin parts of your retina.

At night, incredibly soon after the quick sunset, the sea is black, but if the water is torn—if the slightest disturbance is made in the sea—it shines out in a liquid silver luminescence. White flames, much brighter than moonlight, flash and ripple away; and a stone dropped will show the silver trail down and down as it sinks, while on the surface widening rings, fainter and fainter, spread away. We dropped a pin from the rail and saw a tiny flick of light on the sea twenty feet below.

V

Beebe studied certain of the inland fresh-water creatures in the brackish lakes at Matalas and Thomazeau. And one day when we had waded through the sulphur swamps at Source Matalas we had a thrilling experience. We found no sign of life in the strong-smelling waters and were on our way home when we saw the bright flash of a leaping fish. To my eye 't was merely a flash, but Beebe shouted, 'Tarpon!' I think this wonderful, for how could anyone give a name to a flick of light? I had read somewhere that up to this time only one breeding ground of tarpon was known in the world, far away from Haiti; and how could any creatures live in such sulphur water?

We went for our fifteen-foot net and began a sweep of the small sulphur-green lagoon. And all of a sudden, without warning, we had fifty-six baby tarpon leaping like mad to escape our seine! And here was another breeding place for the great sporting fish. The little tarpon is, to my eye, exactly

like the grown monster in every detail but size. What his father leaps in feet, he leaps in inches, with every fin and tooth the same. And the bright wild eye is there.

It would be a pleasure to devote the whole of my article to Beebe. His fame—which in science is even greater abroad than at home; and I should like to quote Sir Ray Lankester and Professor d'Arcy Thomson—his fame as an observer is a splendid thing. And I smiled in lessening wonder when everyone in Haiti seemed to be in competition to serve him. One day an aeroplane came from far inland at one hundred and ten miles an hour to bring Beebe a brook fish just caught. It was packed in ice and the colors were still fresh.

The thought jumped to my mind that I should like to see the island of Haiti from above as well as below, and Major Geiger of the Marines took me on a flight. I was trussed up according to standard and belted into the observer's seat in easily slipped buckles, a parachute on my hind quarters.

'If things go wrong, dive headfirst over the side; straight down, mind you. Then count three and pull this ring. That's all.' These were grim words to a tenderfoot, but all thought of danger was gone in a moment when we soared over the sea. And as I rose up to zenith I saw more of nadir. Looking downward, I could see the very fish I had so nearly caught in my hands when I had walked among them.

We made for the mountains and rose more than a mile to clear the furled air off the peaks. But we had a few airhole drops which are rather terrifying to the beginner, and yet I found myself unaccountably thinking of equations of the n th degree and of the loss of La Gioconda from the Louvre! This would n't do; it was the sign of turbulent emotion.

We passed so high over the Artibonite River that I could see its whole sinuous extent — a silver cord, in and out, almost tangled; and I thought of the string we used to pitch over our shoulders, at Halloween, to read a cryptic message on the floor. The great river meandered over a large part of the visible land, a green disc two hundred miles from rim to rim.

When one is a mile and a quarter above the earth, the horizon is still level with one's eyes, not sensibly below one. I pointed outward, level with my eyes, with outstretched arm, and the horizon of the sea was less than three quarters of an inch below the tip of my forefinger.

It is to be remembered that one's view of the earth from an aeroplane is that of a microscopist. When we look through a microscope at the green velvet mould on a lemon, for example, we see fronds and trees in a great tropical forest. And if, as in Fitz-James O'Brien's charming story of 'The Diamond Lens,' little humans moved in the scene, we should have the very view that I had of tropical Haiti.

Now the man in the forest has a *high-power view* of his earth. He sees the life line on his infinitesimal hand, while we, high above, get a low-power view. The homunculus sees fine detail, but there is another type of detail not appreciated from his close-up view: the elements of large masses with color showing only a faint difference from outlying parts. And thus from the aeroplane we could distinguish the sites of ancient farms long since vanished from the close-up view. In England airmen have identified ancient Roman land divisions by taking photographs from a height of half a mile, and in Haiti Captain Boyden has discovered the sites of old fortifications and roads not recorded in the vaguely written histories.

We live in one situation and think we grasp the whole relation between our place and that of distant cities. But as I passed high over Haiti, and saw two or three or four towns simultaneously, I had a sense of human habitation strangely new. Great tropical trees were now fuzzy buttons on crumpled velvet cushions, and men were slowly moving dots. Pigs, with their solid stumpy shadows, are more easily seen than men, whose shadows are like needles; and the thought occurred to me that the gods, looking down, might well neglect to record man as the most important creature on earth.

At one hundred and ten miles an hour we soon reached Cape Haitien in the north. And after viewing the beautiful bay, on which ships looked like wisps of straw, we turned back and made for the terrible Citadel, built by Christophe, the black Emperor of Haiti, on the highest peak. We banked steeply and skimmed past the windows of the great fortress, and I had many stirring thoughts as I remembered the story.

Christophe, when the blacks had massacred the French and had torn the white from the tricolor, enslaved his own people more horribly than the foreigner had done; and he built this fortress solid and sheer on the precipitous mountain to defy all comers. I saw the great bronze cannon which never fired a shot.

The black Emperor killed his French prisoner-architect when the last stone was laid. But he had a short reign, and I wondered what had passed in his dark mind on the last night when the slaves came roaring up the hills for him; for he shot himself with a silver bullet (some do say gold) and ended all.

To-day little negro boys show one gayly through the passages. Old gray-headed negroes look up at the Citadel

with an expression which suggests that the world is too active, too unknowable. They know the story vaguely, but they turn to their furrows and think no more, while the walls of the fortress, stone by stone, slowly crumble into the valley.

On coming back Major Geiger, bully fellow, flew out to sea and circled our laboratory schooner. He came down so close I thought he'd cut our outriggers (newly painted) and I waved to my friends.

VI

When I came aboard again these friends were hard at it analyzing the ways of fish, forming a life history. The technical work is extensive and heavy. A specimen comes in and its colors are carefully matched with Ridgeway's exhaustive scale of hues. If any doubt arises, notes are taken and sample trials with pigment mixtures are made while the colors are still fresh. This is important, because after death the colors of a fish either change or vanish. Measurements are made from point to point and certain ratios are calculated. Photographs are taken — plain, colored, and moving.

The internal organs are examined, the food of the fish is determined, and it seems to me that no analysis I have ever seen in many years of laboratory work is quite so exhaustive. All previous references by other observers are read; and if there is any discrepancy additional specimens are obtained and all variation is noted. Thus there is no question of doubt, and the species, new or old, is fixed for the locality in which it was found.

To get the specimens requires untiring ingenuity. Some fish can be got only by the use of dynamite. After one has gone down to the bottom and learned the location and the habits of a species, a stick of dynamite is exploded

and the compressional waves kill the fish without visible physical injury. Other species we get at night with the immersed high-power electric light. And Merriam got a very rare fish by shooting it far under water with a special gun he had invented. We have very small nets of silk thread; linen nets one hundred feet across; hand nets with long poles and short; grains (pronged tridents), arrows, hooks, and traps sunk to the bottom of the sea and left with marking buoys. Fishing rods — minnow and tarpon; and quick, sponge-closing hands to capture in them the massed riches of Haitian waters.

There is much to do. Sea water runs in glass aquarium boxes and fresh water in others. Colored lights are ready to test specific reactions — such as those of a strange spider crab who would swim only toward a red light, and a camouflaging fish who changed his color from blue to lemon yellow. Green lights, amber lights, day-colored lights. Then the complex photography requiring many different sorts of lenses and plates and a cinematographic camera designed by Tee-Van for taking movies on the sea floor.

There are coral rocks to be broken up, revealing microscopic creatures of incredible design and hue; great harpoons and ropes to deal with Gargantuan sting rays or sharks. Sharks, by the way, are no more dangerous than strange dogs, which, of course, we avoid even when we walk up Fifth Avenue. But we do not scream and run, because we know that strange dogs do not seek man as food.

Then there is the microscope, and I'm sure I should have the experience of Fitz-James O'Brien's man with his diamond lens were I to gaze too long. Creatures divinely beautiful come out of the water forests as in that pretty tale, and I can now believe the age of

the earth to be ten thousand million years, for to create their forms would surely take that long.

We watch the jellyfish in the fan of light after dark, and we see now and then a hundred silver fish leap out to escape an enemy; we watch the swift scarlet sea worms swimming in circles. A rare red-headed bird swoops in from the dark and away. Down on the water someone shouts for the No. 17 net, and it must be lowered instantly with no

fumbling. A new creature is scooped in and we all rejoice.

We have risen at six-thirty and swum in the sea, have had our breakfast and worked on until the next and the next swim just before dinner. At four-fifty we have sipped our iced rum punch, and after dinner we have worked again. At ten we are in bed, and no one dreams of tarantulas. . . .

Thus I roughed it in the tropics.

CHRISTIANITY AND PROSELYTISM

BY R. C. HUTCHISON

EVANGELICAL Christianity is usually represented as a proselyting religion, the benefits of which are for those who become Christians. Intensive evangelistic efforts in the homeland and wide-flung mission lines in non-Christian lands bear eloquent testimony to this conviction of orthodox Christianity. There are many leaders who speak the thought of their great parishes when they state that the one and only function of Christianity is to 'bring men to a saving knowledge of Jesus Christ,' by which they mean proselytism to the Christian faith.

But Christianity has another function and another message which do not involve proselytism. It has a purpose in the world beside that of making men Christians. It is most unfortunate that the evangelical zeal of its leaders has caused that fact to be overlooked. Sympathetic understanding of Christianity at home and in non-Christian lands would be greatly furthered if these nonproselyting objectives were

more clearly recognized and more constantly stated. Certain insistent problems of the American Church and its missionary organizations would be greatly simplified by a recognition of the twofold message of the Christian faith, and many indifferent people would be attracted by a clear presentation of its nonevangelical message. Such a balanced emphasis, furthermore, would present a working religion in which the thinkers of Christian and non-Christian lands would discover more to remind them of Jesus Christ.

When Christ stood in the temple and cried to the surging mob that He had drink for their thirsty souls, He knew that most of them would never become Christians. Yet He did have refreshment for all of them. When He healed the lepers, He knew that they would not thank Him, much less follow Him. Yet He healed them. When He taught the Beatitudes to the multitude, He knew that His hearers would not become disciples. Yet He taught them.

In brief, while Christ had a unique and eternal message for those who would follow Him, He had, at the same time, a great and unprecedented gift for those who He knew would never become Christians.

Christianity, likewise, has such a gift. It proposes to make certain contributions to the world, and these proposals are not based in any way on proselytism. They are based simply and frankly on the words and life of Christ. To receive the direct benefits of these contributions no man in the world needs to become a Christian. No theological or doctrinal faith in Christ is necessary. The recipients and beneficiaries may be Moslems, Hindus, Shintoists, or devil worshipers. Christianity proposes to make these contributions even though from this day to the end of time not a single person surrenders his indifference or deserts his own faith to become a Christian.

I

In the first place, Christianity proposes to offer pure and unselfish service to all men, without money and without price. Christ taught the multitudes, healed the sick, comforted the sorrowing, ministered to the poor, and died in behalf of men, with but a handful following Him. It is evident that at no time in His life was He visionary enough to expect anything else. From the beginning of His ministry He knew He would be rejected of men. But He carried on, nevertheless, because men needed that ministry. He healed men, in addition to other motives, because they were sick and needed healing. He comforted men because they were heartbroken and needed comforting. He taught men because their minds were dark and needed teaching.

Christianity proposes to perform the same ministry, in so far as it is able.

Its purpose is to heal the minds, the bodies, and the spirits of men, to cast out devils which rack body and soul, to wipe out leprosy and other pestilential scourges, to minister to the needy, to comfort the mourning, and to develop in men the health and capacity for a fuller enjoyment of life. To this end it is establishing hospitals in every land, whether it be Christian, Moslem, or Confucian; it is dotting Asia and Africa with its schools, and there is no form of human suffering and misery which is not being challenged and combated by Christianity through one or another of its agencies.

The important fact is that this proposal of Christianity, already substantiated by the investment of millions of dollars and thousands of lives, is not for the purpose of proselytism. While those in charge of many such institutions hope and work for converts, it is invariably recognized that this gift of service to needy men requires no pay in the form of conversion to Christianity. The most superficial glance at the work of mission institutions as well as philanthropic enterprises will discover ample evidence that this service is administered impartially to men of every race and every faith. Though never another Moslem turn to Christ, nor devil worshiper leave his fetishes, nor Hindu stir from his ancient philosophies, still Christianity will offer these services to all.

In the second place, Christianity proposes to lift human personality to a primary place in the thoughts and considerations of men. Christ attempted this in His day and age. Among a people indifferent to the importance of children, He valued them collectively and individually. In an age which hated the lepers as unclean and left them to rot their miserable lives away, He stretched out His hand and touched them, teaching for all time

that the value of the personality of one of these was beyond the ken of human comprehension. In a self-righteous society which would have stoned an impure woman, He dared to believe her worth saving. Disregarding the powerful race prejudice of the 'chosen people,' He recognized Syrophœnicians and Samaritans as being of equal value. Scorning class feeling, He found among the despised taxgatherers men as worthy of His love as those who served in the temple. This recognition of the value of human personality was a conception which could have been accepted by any Jew in Palestine without becoming a disciple of Jesus. It was one of Christ's nonproselyting contributions to the thought of His age.

Christianity proposes to make a similar contribution to this age. It proposes to teach the value of human personality in every land and under every condition. It is opposed to slavery in any form, not because of traditional cruelties, but because of the dwarfing of personality which is slavery's inevitable concomitant. It is opposed to child labor in the sweatshops of America, the collieries of Great Britain, the rug factories of Persia, or at the looms of China, because such a system is, for the children, a torturous murder of their personality. Christianity is actively opposed to the opium traffic, to excessive alcoholism and such social evils, because they are known to hamper and chain personalities which should be released for powerful service. Christianity at heart is opposed to war, not primarily because of maimed limbs and destroyed lives, but because of the repression of human personality which is essential to national military success and achievement. Christianity proposes to further in every nation that education which serves the peculiar needs of each people, to the end that men and nations may develop those

diverse personalities with which they have been endowed. And none of this depends upon proselytism. Christianity is pledged to the accomplishment of this programme though not a single convert be gained in the process.

In the third place, Christianity proposes to remind all men of a personal responsibility before a just and loving God to whom they have direct access. Christ came to a world wearied of priestcraft, and He represented a God who had long before expressed Himself as hating the ceremonies and intermediaries which stood between Him and His people. Christ struggled to eliminate these obstacles to direct communion, and taught that every man — not only His disciples — that *every man* had direct access to the Father in Heaven, that within the chamber of each man's house was an entrance to the Holy of Holies, and that within the Holy of Holies was a God, not vengeful and cruel, but loving, tender, and fatherly.

Christianity likewise proposes to do away with deadly burdens of priestly religion and to teach men that they have direct access to a God who is a loving father. It proposes that the world dispense with the crude idols which blur its consciousness of God, and that the heavy and antiquated priesthood in all religions, including the Christian, be abolished in so far as it stands between the aspirations of worshipers and their attainment of God. The accomplishment of this objective involves the destruction of no non-Christian religion and requires the conversion of no man from his own faith to that of Christianity. But upon all men of all religions who are weary of ancient liturgies, burdened with massed traditions, confused with man-made obligations, Christianity urges a pure spiritual worship of and a loving obedience to a Father God who

can be approached directly by every soul.

In the fourth place, Christianity would bear testimony to a great and deep conviction, which is that spiritual values will be ultimately supreme in the destiny of men. This conviction found its first expression as Christ sat on the hillside and said such things as these: 'Blessed are the meek: for they shall inherit the earth. Blessed are the pure in heart: for they shall see God. Blessed are the peacemakers: for they shall be called the children of God. Blessed are the poor in spirit: for theirs is the kingdom of heaven.' Each of these sayings is a promise that spiritual forces and spiritual values will ultimately predominate and conquer.

Because Christianity feels an incapable compulsion to carry this conviction to men, it translates these sayings into every known tongue and sends them where no missionary dares to go. It bears testimony to its belief that the meek are, more and more, inheriting the earth, that right is slowly downing the forces of evil, that good will be taking the place of ruthless conflict, and that love is the most potent force ever released by God for the use of mankind. Christianity hopes that there will be more men like Gandhi, who, though not necessarily Christians, will demonstrate in their lives the superior power of spiritual forces. The benefits of this testimony do not depend on acceptance of the Christian faith. If these convictions find their way into the tenets of Islam or the sermons of Brahmanism or the books of Shintoism, Christianity will be rejoiced.

The last great proposal which Christianity makes is that men be taught that the indispensable requisite for accomplishment is sacrifice. Christ taught this to all who watched Him live, regardless of whether they accepted anything else in His life. He

demonstrated that self-sacrifice was the basis of all accomplishment, the key to success, and the constant element in all service. He paid the price of self-sacrifice for every accomplishment of His own life. Even His remarkable work of healing was the result of a sacrificial agony of prayer, as witness His words to the unsuccessful disciples, 'This kind goeth not out but by prayer and fasting.' Finally He seared this truth into the consciousness of all men of all religions by sacrificing Himself on the cross, forever teaching the cost of accomplishment — self-sacrifice.

Christianity proposes to teach this fact to the world of men regardless of their acceptance of Christ. It wants young men everywhere to know that if they would serve their times they must be willing to surrender selfish comforts and gratifications. It wants men of every faith to know that patriotism is only such when it puts self last and the nation first. It would teach young Egyptians that nationalism is not enough, that it is useless unless accompanied by self-sacrificing idealism. It would teach young Turks that it is not enough to throw away their red fez and overturn their hodja schools. They must surrender more than ancient laws and customs. They must surrender *themselves* if they would make Turkey a great nation. Christianity would teach young Persians that, whether or not they follow the Christ, they must crucify themselves on the cross of Persia else their nation will remain in humble defeat. Christianity would hold before the world of Hindus and Moslems and Shintoists and Christians a dying Christ on a hard cross, and teach all men that this is the price of service in any land and in any religion.

This is the nonevangelical, nonproselyting message of Christianity. 'Ho,

every one that thirsteth, come ye to the waters . . . buy, and eat . . . without money and without price.'

II

On the other hand, Christianity must proselyte. It has another gift for those who will accept it and a clear commission to perform. Though this commission and this gift involve proselytism, it is not for the purpose of multiplying adherents or of defeating other religions. It is a solution offered in pure love with the conviction that it will meet one of the world's hardest problems.

All religions have contained excellent precepts and lofty laws. Follow any religion to its source, and principles and teachings will be found for which the world is richer and which are God-inspired. There has been no poverty of principles and teachings. Literature now is teeming with sweet thoughts and high standards of living.

However, eloquent testimony is borne to the fact that men are not inclined to heed these precepts. The worldly-wise precepts of Confucius, the love and selflessness of Buddha, and the pure monotheism of Mohammed would each transform the world had men the desire to follow these teachings. But the complaint is as old as the mounds of Babylon that men of China will not obey their teachers, that young Buddhists are indifferent to the noble precepts of their religion, and that young Moslems show no inclination to follow those Islamic teachings which are worth while.

It is exactly here that Christianity believes it has a unique contribution, and one of such definite value that to withhold it would be morally wrong. Christianity believes not only that its religion is a code, a principle, a way of life, but that it has an actual power

which enters into the personality of man and gives him both the desire and the ability to obey higher laws. Any brief statement of this unique contribution will be criticized. Nevertheless, we may dare to state that evangelical Christianity believes that through the living Christ there come to men an infusion of life and power and a spiritual will which make possible a long process of spiritual growth, a soul evolution. Aside from this there seems to be no assurance of the attainment of that righteousness which will make men worthy colaborers with God in the task of eternity.

Believing this, evangelical Christianity has no more right to conceal its contribution than a wealthy man has to bury his treasure. In fact, considering the disturbed condition of the world to-day, no person or group has any justification for withholding any serious proposition that can be offered as a solution. The outstanding problem of the world is the degeneracy of human character expressing itself in imperfect human relationships, in unhappy social conditions, in unnecessary industrial ills, and in civic and national unrighteousness. For the solution of this problem Christianity has a serious proposal, as outlined above. It has no right to withhold this proposal; and, so long as it seems practical, Christianity should exert every effort to lay that proposal before the minds of men and to demonstrate it in the laboratory of human experience. Christianity has, therefore, an obligation to carry its evangelical and proselyting message along with its nonproselyting activities.

III

This whole matter is not merely an academic question. There are great and harassing problems which hinge

upon it for solution. Most outstanding of these problems is that which results from the diverse opinions of those who administer Christian philanthropic institutions throughout the non-Christian world. One group feels that the policies of such schools and hospitals should be directed toward the ultimate goal of proselytism. This group is opposed, often in the same institution, by those who with equal sincerity feel that service and not proselytism is the only justifiable objective. Those who have not worked in these throbbing centres of Christian activity in far lands can scarcely comprehend how acute is the problem which results from this divergence in judgment.

Recently, because of events in such countries as China and Turkey, the question of proselytism and philanthropy has thrust itself forward with new insistence. Where legal restrictions or other circumstances make religious teaching impossible, are our hospitals to be continued for purely medical work? Are schools supported by the Christian Church still to receive such support when the evangelical message cannot be presented to the students?

In a personal way, also, this general problem is faced by literally ten thousand Christian workers who are scattered over non-Christian portions of the world, and by a larger number who labor in homelands. In their daily choice between imperative and unfinished tasks, amid a growing tendency toward institutionalism in religion, they must determine what proportion of their time and effort can be legitimately expended on that service which is not definitely evangelistic. Some inevitably abandon themselves to non-proselyting service, many hold themselves devotedly to that work which is evangelistic, but the vast majority will be found struggling to discover which

is right, and wavering between one emphasis and the other.

The greatest number involved in the problem of proselytism, however, comprises those millions in Christian lands who support the world-wide work of the Christian Church and whose contributions build the magnificent philanthropic institutions of both East and West. With each new appeal and each new drive, these men and women are called on to judge this issue. They have constantly to establish and re-establish their own standards as to the proper objective for Christian institutions in non-Christian lands. They are compelled to reach some conclusion as to whether such institutions should be definitely evangelical or purely philanthropic. Many of these supporters are conscious of the importance of first one objective, then the other. Finally, assuming the objectives to be mutually exclusive, they seize upon one alternative and cling to it with an uncomfortable devotion.

But the solution of this general problem in its several aspects lies neither in absolute proselytism nor in absolute philanthropy. Each of these extremes is being tried at the present time and the result is conflict, confusion, and much misunderstanding. The solution, as always, lies in balance, in proper emphasis on each, in the neglect of neither.

Those involved in the administration of Christian institutions, and those countless faithful ones who support by their contributions, will find some of their hardest questions answered and the entire situation considerably clarified if they will recognize both the proselyting and the philanthropic function—if they can accept either as justifiable in itself alone, and at the same time hold both to be absolutely essential for the solution of the world's hardest problems.

ARMISTICE DAY

BY HUMBERT WOLFE

I HEARD the trumpets crying 'Lights out! Lights out!'

and the sun was quenched like a dead candle. The stars
drew night, like a film, across their eyes, and from without
a ship I knew not went sailing, muffled to her spars.

She had no name and no beauty. She was not of those
ships, like armfuls of white fire carelessly tossed on the sea,
tossed like a great unintelligible flower, a blind white rose.

She was a black ship, that went sailing, a strange ship to me.

She carried the hope of the world in her hold like a bale,
and the thin notes of the trumpets were her long wake.
She was unimaginably empty, bitter, and stale,
and the sea of dark that she sailed was more bitter for her sake.

And the trumpets cried 'Lights out! Lights out!' And I listened
to their cadence echoing in the hearts of all the lost.
'Lights out! Lights out!' they answered, and the words glistened
like a firefly dancing between the ribs of a ghost.

'Lights out!' and the trumpets were silent. But out in the dark
the black ship sailed, and those on the further shore
cried as they saw at her masthead glitter a single spark,
and the spark died with the trumpets, and they cried no more.

THE NEEDLE'S EYE

BY RAYMOND EDWARDS HUNTINGTON

I

'It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God.'

Without irreverence or disrespect for the Scriptures let us change this colorful statement so that it shall read: 'It is easier for a camel to go through the eye of a needle, than for a rich man to avoid death taxes.'

Let us picture the needle's eye as the inheritance-tax situation through which estates must pass before they can be distributed to expectant heirs. How much of the estate will be torn or rubbed off in passing through the needle's eye?

The Revenue Act of 1926, with its welcome and material reduction in the Federal Estate Tax, received widespread publicity and the impression is almost universally prevalent that the needle's eye has been enlarged to so comfortable a degree that the subject of death taxes should now be considered of trifling weight, not worthy of serious study. The increase in the Federal exemption from \$50,000 to \$100,000 automatically removed a vast number of estates from Federal taxation, while the reduction in rates by the Government still further lulled the public into believing that death taxes were slowly but certainly passing out of style.

So far as estates of \$100,000 or less are concerned, the situation was vastly improved by the passage of the Revenue Act. But, directly this act became a law, there crept quietly and inevitably into the scene a joker. First one state,

then another and another, without the blowing of trumpets and with a minimum of publicity, inserted this joker on its statutes until now its application is so frequent and its extension so evident to those conversant with death taxes that the man of affairs should be brought face to face with the needle's eye. What has happened to it? It appears to be larger. Is it?

One of the most potent arguments brought to bear upon the former Federal Estate Tax was the fact that it originated as a war measure and was an invasion into the field of States' rights. Uncle Sam was said to be poaching upon private domains. He should get out and stay out. Death taxes should be imposed by the states and by the states alone.

In increasing the exemption and in reducing the rates the Federal Government made great strides toward quitting this field of taxation. The ink was hardly dry on the Revenue Act of 1926, however, before New Jersey enacted legislation taking advantage of the new 80 per cent credit allowed by the Government. Quick on the trigger as was New Jersey, she was closely followed by similar legislation on the part of Georgia, Virginia, New York, and Massachusetts. From then on, several other states have eyed these green pastures so recently left by the Government and enacted legislation which has legalized the grazing of these fertile fields.

The trend is unmistakable. Whereas

for a brief time the needle's eye was enlarged, the states are now fully alive to the situation and the opportunity. Many of them have already, by one method or another, availed themselves of an unusual situation. To themselves they said, 'We need the money. Our new law will not increase the tax burden on the estate; it will merely bring in to us what would have formerly gone to the Government. We will take what the Government leaves.' Thus in many states the needle's eye has resumed much its former size. It still scrapes off most effectively material portions of the estate which passes through.

Prior to the passage of the Revenue Act of 1926 the needle's eye was in twilight. Many of the shadows that served to make mysterious this field of taxation have been dispelled. There has been no sadness of farewell as certain of the more vexatious phases passed.

Wisconsin gives us a good picture of the passing of the shadows. From the inheritance-tax standpoint she has long been known as an 'unfavorable' state. In the rapaciousness of her death taxes there was a mediæval flavor. She went so far as to hold that a gift made within six years of death should be considered to have been made in contemplation of death and was therefore taxable. Having pushed the pendulum of taxation beyond the limits of justice, the reaction was inevitable. In the case of *Schlesinger v. The State of Wisconsin*, Wisconsin courts sustained the validity of the Wisconsin inheritance-tax law. Carried to the Supreme Court of the United States, the decision of the Supreme Court of Wisconsin was reversed, making this section of Wisconsin's inheritance-tax laws invalid. Thus an unreasonable and unjust law was wiped from the slate in a state where vision has been sadly lacking in the framing of inheritance-tax legislation.

For a number of years there was a

small group of states which had gone to the extreme in their endeavor to extend the scope of their inheritance taxes. In this group was North Carolina, mentioned not because her laws were worse than others in this group, but because in her courts a legal battle began which ended in the Supreme Court of the United States on March 1, 1926.

The case of *Rhode Island Hospital Trust Company v. Doughton* has had such far-reaching effects upon the death-tax situation in other states that a brief sketch may picture the passing of this shadow. Among others, North Carolina held taxable in the estate of a non-resident decedent the shares of a foreign corporation owning property or doing business in the state. Consider the breadth of this law. Many corporations do a national business, owning property in many states and entering every state so far as the transaction of business is concerned. Under this law, shares of such corporations became taxable in the estate of a nonresident.

George Briggs lived and died in Rhode Island, leaving a large estate. He never lived in North Carolina. The Rhode Island Hospital Trust Company, as executor under Briggs's will, found among his personal property a block of Tobacco stock amounting to over \$100,000. The Tobacco Company is incorporated under the laws of New Jersey. Two-thirds in value of the entire property of the Tobacco Company is in North Carolina. On this basis North Carolina taxed the estate a little over \$2000, assessing the tax upon two-thirds the value of the Tobacco stock.

Thanks to the fighting blood of the executor, this case was carried to the Supreme Court of the United States, where Chief Justice Taft, in a refreshingly clear opinion, declared the North Carolina law invalid. In effect, North Carolina held that the owner of shares of stock in a corporation was for that

reason part owner of the property of that corporation. Our Supreme Court held this line of reasoning unsound and declared that the owner of stock in a corporation is not to that extent the owner of the property of that company.

This decision in favor of the Briggs estate has been a milestone marking the progress of more favorable legislation in death taxes, because it affected not alone North Carolina, but each of the states which had similar statutes, which with the handing down of this decision became at once invalid.

A glimpse of the wide influence of this decisive ruling of the Supreme Court is had when we note that it affected, directly or indirectly, such states as Arizona, Arkansas, Louisiana, Texas, Utah, West Virginia, California, Colorado, Iowa, Minnesota, Montana, New Mexico, Oklahoma, Mississippi, and Tennessee, among others.

II

But these are the lesser shadows.

Always the worst pinch in passing through the eye of the needle was the paying of the multiple tax. The double tax is still inevitable in estates of over \$100,000 in the great majority of our states. A little over a year ago triple taxation in the larger estates was a matter to be expected under the then laws. It was the overlapping tax, by the state of residence, the Federal Government, and then by one or more foreign states, which lined the eye of the needle with thorns. In this, the most vicious phase of the old laws, there has been a marked change for the better.

By far the most popular method of killing the multiple tax has been the enactment of reciprocal exemption legislation. To illustrate: Massachusetts says to New York, 'I will agree not to tax the heirs of New Yorkers on the stock of Massachusetts corporations

which they are to inherit if you will agree to extend the same courtesy to residents of Massachusetts.' New York and Massachusetts both agree. Before New York and Massachusetts became 'reciprocal' the following situation was not only possible but common. Jones, a New Yorker, died leaving an estate of several hundred thousand. In the estate was a block of about \$25,000 in stock of the Edison Electric Illuminating Company of Boston, a Massachusetts corporation. Under the old laws this stock felt the pinch of the eye of the needle, for it was taxed, first by the Federal Government, then by New York and by Massachusetts. Under the present situation the triple tax has passed in this specific example, as Massachusetts has exempted this stock in favor of the New York estate.¹

New York, Massachusetts, Pennsylvania, and Connecticut were among the leaders in enacting reciprocal exemptions. The change that took place in New Jersey is especially interesting because of the fact that formerly she was known as an 'unfavorable' state as regards death taxes, while at the same time she was the state of incorporation of many companies most attractive from the standpoint of the investor. In fact, if an investor was discriminating in his selection of choice investments, he was certain to have in his

¹ Another thorn appears in the eye of the needle as we go to press. New York drops from the reciprocal group of states. A recent decision of the Court of Appeals holds unconstitutional the transfer tax on the property of nonresident decedents. It so happens that the reciprocal exemption clause falls within that portion of the law which has been held unconstitutional. Hence, until this is remedied, New York becomes an unfavorable state to the nonresident, and in estates of over \$100,000 a triple tax is possible. This decision also bears directly upon the estates of residents in that they may be liable to taxation in any of the strictly reciprocal states. A multitude of investors will watch this complicated situation with interest.

list of holdings the stocks of more than one New Jersey company, thereby aggravating the position of his family on the inheritance-tax situation.

New Jersey solved the problem without reciprocal exemptions. Her solution was simple, direct, effective. She said in substance: 'We will not tax the transfer of stock of domestic corporations in nonresident estates.' She takes no recognition of any reciprocal legislation, in that she does not confine her exemption to a group of reciprocal states. From an 'unfavorable' state she has turned to the right-about and is now demurely seated in the front row of the 'favorable.'

Without regard to the order of their happening, let us see how other thorns in the multiple-tax group have been removed from the needle's eye. In February of this year we learn that the following states had legislation pending, which if passed would bring them into the reciprocal group: California, Indiana, Maryland, Missouri, New Hampshire, Oregon, South Carolina, Illinois, and Maine. In April Colorado passed a new inheritance-tax law taking much the same broad position as did New Jersey, in that she does not now tax the intangible personal property of a nonresident.

At about the same time Ohio became reciprocal as of June 30, 1927. Maine's gesture toward reciprocity is futuristic, in that her law making her reciprocal does not become effective until July 1, 1928. Translating this into terms that the investor may understand, it means just this. If you live in New York and happen to own stock in a Maine corporation, such as the United States Smelting Company, and die before July 1, 1928, it is quite possible that your family would have to pay a double tax, perhaps a triple tax, on the Maine stock. The triple tax would occur if your estate was much over

\$100,000, as the Federal Estate Tax would then appear. The double tax would come from Maine and New York, the state of residence. Thus until July 1, 1928, Maine cannot be regarded as a favorable state, and stocks in Maine corporations should be handled with care by elderly investors.

New Hampshire, a sister state, passed reciprocal exemption legislation, whereas Massachusetts, one of the pioneers in the reciprocal group, went a step beyond reciprocity by exempting nonresident decedents on all property within the state excepting only real estate and interests therein and tangible personal property. Here rises an interesting legal question yet to be decided. Have Massachusetts and New Jersey, in going a step beyond reciprocity, disqualified themselves with the group of states which are strictly reciprocal? From a technical standpoint they are no longer reciprocal, yet it would be a penny-pinching practice to exclude them from the reciprocal exemption privilege solely because they had taken a step in advance of the majority of states.

Maryland joined the reciprocal group of states as of June 1, 1927, while North Carolina dispelled a local shadow by exempting from death taxes gifts to charitable, religious, and educational institutions organized in or disbursing in that state.

Turning aside from the reciprocal exemption, in two states we find an economic awakening that is significant. In Pennsylvania we find the Tax Commission taking a farsighted position as regards inheritance taxes. The Commission argues that death taxes, being a capital levy, should be strictly so regarded. Moneys collected from this source should be added to the capital of the state and not dissipated in current expenses. It is interesting to note that at this time we also find a bill before

the legislature of Arkansas calling attention to this same economic principle and stipulating that inheritance-tax funds shall not be used for public expenditures, but shall be paid into the state building fund. Here we have progress. Many other states may well follow suit.

An analysis of the widow's exemption in the different states since May 1, 1925, shows that this situation has remained almost stationary. At this writing but two states have slightly increased the exemption to a widow. A majority still cling to the \$10,000 exemption, which is admittedly niggardly. Seven states allow the widow but \$5000 or even less. Sixteen states have seen the light and allow the widow more than \$10,000. This latter group should grow. There is small reason or justice in allowing a widow less than \$25,000 exempt from all death duties. Better to grant an exemption that will leave a modest competence and then tax more heavily above that figure than to be too grasping in taxing the widow's mite.

III

From what has passed we have seen how the needle's eye has been apparently enlarged and smoothed by the passage of legislation favorable to the nonresident. We said 'apparently.' Let us see what the 'joker' has done.

In state after state the same bill that included the favorable reciprocal clause also included a provision which has been most effective in narrowing the needle's eye to virtually its former size. In a vast majority of states the overlapping tax, evil and unjust as it was, did not constitute the real burden of the tax. True, it was the most irritating and annoying phase, but rarely was it the most costly. In but one of the many estates which I have analyzed has the multiple tax been a serious factor. Usually the multiple tax was a

small item in each of the states where it occurred. In other words, the bulk of the tax has generally been found to lie between the Federal Government and the home state.

The passing of the Revenue Act of 1926 created a situation unique in the history of our country, because under this act the Government allows a maximum credit of 80 per cent of the gross Federal Estate Tax against the total of all inheritance taxes paid to states. Here was the opportunity of an æon or two, and our state legislators were not slow to grasp it. Here was Uncle Sam deliberately knocking in the head of a pork barrel, and then smilingly turning to the states and saying to them, 'Come on, boys, help yourselves. Here's as nice a mess of pork as I've had in a long day. Better step right up and get some.' They did.

Let us illustrate the working out of this 80 per cent credit. Imagine that Jones, a resident of New York, leaves an estate that is subject to a New York inheritance tax of \$5000. Assume arbitrarily that 80 per cent of the Federal Estate Tax on his estate is \$10,000. The Federal Government stands ready to allow the full 80 per cent credit if state inheritance taxes total that amount. What is more simple than for New York to say, 'We will add a new estate tax of our own which will be the difference between our inheritance tax and 80 per cent of the gross Federal Estate Tax, and in this way we will assure ourselves of the full 80 per cent credit, a portion of which would otherwise go to waste upon the innocent and unsuspecting heirs, who do not need the money half as much as we.' That is what has happened. Therein lies the joker.

State after state has added a new tax which takes advantage of the 80 per cent credit and thereby adds to its coffers handsome and welcome revenues. Let it be remembered that this 80 per

cent credit is available only in estates which run over \$100,000; in other words, it is possible only in the larger estates. But for this same reason it brings in handsome revenues by a most efficient system. A tax official in a neighboring state told me of a single instance where the new law had brought to the treasury of his state a matter of a million dollars from one estate. This joker is not a thing to be sneezed at.

Let us again be specific. Let us see just where this joker has encamped and note where the needle's eye has partially closed again.

As of March 19, 1926, Georgia took advantage of the 80 per cent credit. Again we disregard the exact order of events and merely mention the happenings. Delaware took the 80 per cent credit on estates of over \$200,000. Maine, Vermont, California, Colorado, Virginia, New Jersey, New York, Rhode Island, Massachusetts, Montana, and Missouri stepped bravely up to the pork barrel and took their slice of the 80 per cent credit. Has anyone suggested that our legislators are slow? By the time this article finds itself in print it is likely that other states will have added themselves to this group. Our joker is a popular fellow. His ways are taking.

In a word, there already appears to be a strong trend on the part of the states to avail themselves of the liberal credit allowed by the Federal Government and by this simple method to increase their revenues. By this action the death-tax situation is restored to much its former status, with the exception that tax by foreign states is passing. The state of domicile is taking what the Federal Government does not take. Instead of paying a large tax to the Government and a large tax to the home state, the situation in states that have acted to secure this credit is changed as follows: the tax to the Federal Government is now the smaller and

the tax to the home state is the larger of the two. To illustrate: in an estate which has recently passed through my office for analysis I find the Federal Estate Tax to be about \$4000 while the taxes due to the state of residence will approximate nearly \$17,000.

For this reason the present attitude of indifference on the part of our investors is both illogical and dangerous. Death taxes are not a thing of the past. They are very much of the present. The slight shrinkage which they may experience through favorable action on the part of foreign states is beside the real point at issue. The facts are that tax by the state of residence and the Federal Tax have always been the major items. While the latter has been materially reduced, the former is being radically increased. Hence for all practical purposes the tax situation in this field is rapidly approaching its former status so far as tax totals are concerned, and it behooves the investor to determine what these taxes will amount to and what debts his passing will thus incur.

IV

Unknown to investors at large, a curious undercurrent has developed between two groups of states. One group of about twenty states is politely suggesting to Congress that it abolish the Federal Estate Tax and thus leave to the states alone the field of inheritance taxation. The smaller, but more alert group, those who have passed legislation taking advantage of the 80 per cent credit of the new Estate Tax, view with concern this movement on the part of the larger group. This smaller group is well pleased to have the Federal Estate Tax remain as it is, because if the Federal Tax is abolished these states will automatically lose the very welcome revenues which they are now enjoying under their newly enacted taxes.

The adoption of new legislation by this smaller group of states to secure the full 80 per cent credit on the Federal Estate Tax has in several states brought about an unprecedented situation. Take Massachusetts as an illustration. Here we have a state which now has two kinds of death taxes, an inheritance tax and an estate tax, each fundamentally different in principle and application. The inheritance or legacy tax is a tax upon the transfer of the various portions of the estate before they are received by the respective heirs. The number of heirs and their blood relationship has a direct bearing upon the amount of the inheritance tax. The estate tax is a tax upon the entire estate and takes no account of the number of heirs or their relationship to the decedent. Owing to the fact that the Massachusetts estate tax does not apply unless there is first of all a Federal Estate Tax, we have under these circumstances two estate taxes and one inheritance tax payable by the same estate.

These facts should be carefully considered by the investor who happens to live in the group of states which has added an estate tax to its former inheritance tax, because they have an important bearing upon wills. If your will was drawn up some five or ten years ago, have it examined by an attorney who specializes in wills, so that adequate provision may be made for the payment of these estate taxes from the residue of the estate, unless you wish your heirs to receive somewhat smaller portions of your estate than you had planned to give them. Make sure that there will be sufficient residue to care for these two estate taxes, otherwise you may place the residuary legatee in the unpleasant and ridiculous position of assuming a liability rather than receiving a bequest. As a matter of prudence, in view of the state of flux in

which our death-tax legislation now finds itself, it would be well for the investor to have such an attorney go over his will at least once in every two years to make certain that his bequests are in conformity with the most recent inheritance taxes.

Will the Federal Estate Tax stand?

With one group of states praying for its abolishment and another group patting itself on the back and praying that it may remain as it is, it is difficult to find an answer. It would not be surprising if it were retained for a few years, at least, at present rates. One of the factors which may quite reasonably act to retard its abolishment is the diminutive group of states which has no death taxes of any description. Abolish the Federal Estate Tax and at once you establish these states as asylums from inheritance taxes. Is this wholly to be desired?

Weighing both favorable and unfavorable factors, we find that, after all, the needle's eye has changed but little. In the last analysis the total tax is still of such proportions as to exact a considerable toll. There is little excuse for the investor to neglect to have his death taxes estimated by a tax consultant so that he may know definitely whether he has made adequate provision, by life insurance if possible, otherwise by will, for the prompt settlement of these debts. There is small room for doubt that the trend in the states is toward a higher rather than a lower revenue from death taxes. The reduction in the Federal Tax should not befog the investor on this important point.

Death taxes began two thousand years before Christ. Centuries after we are gone they will continue to flourish like the green bay tree. It is the part of the provident investor to recognize them as they are, not as he would like to have them.

'MUGGY,' THE RABBIT AGENT

BY HENRY WILLIAMSON

FROM the high ground of Windwhistle Cross many hundreds of fields are seen, covering the slopes of the hills like a far-lying patchwork of irregular green and brown pieces stitched together with thick dark wool; some fields bright with sunlight, others dull under distant clouds. Most of these fields, varying in extent from a rood to fifty acres, are enclosed by wide banks of earth and stone, topped with hedges of beech, ash, thorn, elm, furze, and bramble.

In every one of these banks are many holes; they are tunneled from gate to gate. Few of the tunnels are straight or level. They rise and fall and twist round inner pieces of rock. Each system has several outlet and inlet holes, with one or more bolt holes used only in panic, hidden by the grass and the plants on the bank.

Sometimes the rabbits, which scratch out these systems, called 'buries,' cause the earth and stones of the banks to fall down, when sheep and cattle tread the breaks into gaps and wander from their rightful pasture. The rabbits nibble the roots of turnip, mangel, and rape; they eat the young corn, the clover, the cabbages, the peas; they dig for potatoes, and rasp the bark of fruit trees. They multiply rapidly—a doe having five or six litters a year, with five or six young to each litter.

Part of the area of these fields seen from Windwhistle Cross, which come by gates to narrow lanes leading past farms and hamlets to the roadways,

is traversed from October to February by a Ford van loaded with rectangular wicker baskets, each bearing two stout hazel-wood bars on which are strung the crossed hind legs of dead rabbits—a hind leg being thrust between the bone and sinew of the other. The van stops at the cottages of trappers, and other places where rabbits are collected. The collector gets down from beside the driver, examines the rabbits, selects what he will take, weighs them on a spring balance, and buys them by weight. The price in a normal season varies from $5\frac{1}{2}d.$ to $7d.$ a pound, including the skin.

In his round the buyer is regular and punctual, and if he knows he will change his time he sends postcards to the trappers, who are busy men. The rabbits, which are sent by train to one of the largest Midland factory cities, must be scarcely injured—that is, caught by the forepaws only. A rabbit trapped by the hind legs often strips the flesh in its struggles, and is not marketable. In five months the van carries rabbits to the value of £6000; that is, between 120,000 and 150,000 rabbits are sent away in the wicker baskets. Actually double the number may be caught during this period, but buzzards and crows 'break abroad' some of them by day, the fox and the badger take them by night. Many are trapped lightly by the forepaw and escape. Indeed, one rabbit in five packed in the baskets has a forepaw already missing.

In our village there are several trappers. One of them pays for the trapping rights of a farm by giving so many weeks' labor to the farmer in summer. A good trapper visits his gins at daybreak and in the evening, but some go along their banks only three times in a week, having other work to do. During the first hours of its agony of struggling, a rabbit fills the night with crying; but terror and pain, long borne with hunger and perhaps the beating of rain and wind, bring the ease of little-knowing.

Besides the regular trappers, there are farmers who hold from seven to ten or twenty acres of land and keep two or three cows, besides a sow and her farrow. Sometimes they bring home a couple of rabbits, taken in their half-dozen rusty gins tilled for rat or rabbit, or shot in the early morning, or caught by the dog at dimmit. The 'bad ones' they eat themselves; others may be offered at the doors of one or the other of the bungalows or small modern houses built since the Great War in and around the village. The unsold rabbits are hung up until an old man called 'Muggy' knocks with his stick on the door, standing there with a basket.

'Good morning to you, ma'm. Any rabbuts to-day, please? Thank you very much.' It may be: 'Good morning, midear. I hope you'm very well. Will you please to ask your mother if she has any rabbut skins? I'm paying three ha'pence to-day — rabbut skins is come back.' Or: 'Rabbut skins is gone up — I'm giving tuppence to-day, if you please. That's right, ma'm, thank you very much.'

Between the two villages he walks slowly, giving a cheery 'good day' to all he meets on the way. Sometimes he has a joke to tell, or a riddle to ask. 'Now, sir, let me ask you a question, please. Can you tell me what it is that

is longer when cut off at both ends? I am asking you a plain question, if you please. Just listen to what I be asking, if you please. What is it that grows longer when cut off at the ends? That's it, if you can answer me.'

The riddle may have been asked before, and Muggy forgotten; but no matter. As with his other riddle (Why did Gladstone wear yellow braces? 'To keep his trousers up, if you please, sir. That's it!'), the answer is not known.

'T is a grave,' says Muggy, moving away, and stopping to explain that in his 'kid days' he saw a coffin lowered in Ham churchyard but coming to rest on the eastern and western edges, so that the grave had to be dug longer while the mourners waited around the pit. 'Yes, sir. That be the explanation. Good day, sir.'

He has no remarks or comments to offer on the actions of other people, and is not concerned with your own. 'I don't want to know your own business, midear. No, sir. 'T is no concern of mine what other volks be doing of. I don't want to know their business.'

Muggy was born at the inn called the Manor House, which is opposite the clubroom steps where now he rests, perched above the stream; but as a young man he sold the inn and went to America, coming back to end his days in the village. For some years, when first I knew him, he had a shanty in the corner of a hillside field, which he reached by climbing the 'ditched' wall on juts of stone. The shanty was as tall as himself, but not much longer or wider than a coffin. His bed was a shelf, and he cooked on an oil stove covered with soot as the stones of the 'ditch' outside were covered with moss. His larder was a box on a post, beside his letter box. In the shanty he shaved and washed and ate, kept his accounts

with the rabbit collector, wrote his occasional letters, stored his rabbit skins; until the local sanitary authorities found and condemned it. He migrated to the village up the valley, renting in Ham a two-roomed cot for three pounds a year. But after a year the landlord had a grandson time-expired in the Army and coming home from Malta with a wife and baby; so he 'rose the rent' another pound; and Muggy, whose income from rabbits and their skins, telegram tips, water-cress and crabs in summer, could not meet this increase, came out and made a room in a cottage opposite, long since disused as a dwelling, wherein sacks of artificial manure, fagots, and

garden tools were kept by the landlord of the Rock Inn.

His journeys between the two villages begin to take longer, his jokes and riddles are rarer; but his cheerful courtesy still brightens the wayside. Everyone knows Muggy, and is sure of him — no casting of eyes on the road or the hedge, awaiting the unsure and awkward moment of glancing up and acknowledging that it is a fine day, or what dirty weather we're having, or that it looks like more rain. Muggy is plain as a field is plain, plough, arrish, or pasture; a rare and simple being, warped to no property, true to itself, and, therefore, to all men. Shakespeare would have loved him.

THE DIPLOMAT

BY JOSEPH HUSBAND

I

EMMA, Lady Hamilton, the 'Divine Lady' of Romney; Horatio, Lord Nelson, perhaps the greatest naval officer the world has ever known; Lady Nelson, the gray shadow that so pathetically hovered in the background of this strangely colorful tragedy; and Sir William Hamilton, soldier, diplomat, scientist, and collector of art and antiquities — was ever there such a quadrangle in which love, romance, and tragedy played their part?

Of Emma Hamilton much has been written; and portraits by Romney, Gainsborough, Lawrence, and other masters of their time have immortalized her glorious beauty. In the crypt beneath the dome of St. Paul's Cathedral

lies all that is mortal of Nelson, but his memory is imperishable so long as England endures or history serves mankind. There are a few gracious tributes to Lady Nelson, for her pitiful nonentity has inspired sympathy. But too little has been written of that fourth actor in this turbulent drama, the husband of Emma, the friend of Nelson — Sir William Hamilton.

I should like to imagine the meeting of Emma and Sir William, as it well may have occurred in the little house of the Honorable Charles Greville, in Edgware Row, Paddington. Emma was nineteen, but in those few years had been crowded a lifetime of misery and bitter experience. Betrayed and a

mother, the girl with her fatherless child had sought out Greville, a young man, well-bred but impecunious, good-looking but inwardly as cold as the legal profession which he followed. In the unhappy girl he had found, not only a conscientious housekeeper and an adoring and grateful mistress, but a brain so alert and receptive that he had discovered a keen delight in its cultivation and in inculcating on her the accomplishments and refinements which were inherent in himself.

It was spring, and sunshine filtered through the green of trees, down through the small-paned windows of the little drawing-room. Beyond the windows could be seen patches of clear blue sky above Paddington Green and the columned cupola of the church; for Edgware Row, now clouded with the smoke of London and echoing to the rumble of buses, was in 1784 beyond the town, a pleasant place of green and sky. Above the mantel hung a Venus by Correggio, and between the windows was a cabinet containing a collection of shells, crystals, and minerals, for Greville, like his distinguished uncle, Sir William, was in his small way a patron of art and science.

The Right Honorable Sir William Hamilton, K. C. B., English ambassador at Naples, had but recently returned from Italy. He was fifty-two years old, with a fine lean face and the lithe body of a horseman; a youngish-looking gentleman with the charm of a man of letters and the ease and grace of a courtier. Two years before, he had come to London to bury the first Lady Hamilton. They had been married for twenty-five years. It had been a relatively happy marriage, for Lady Hamilton, a woman of devout religious faith, idolized her husband. Yet there seems to have been little of the finer fervor on his side, if

we may take an excerpt from a letter he wrote to Greville: —

‘You have been acquainted with beauty enough to know that that alone cannot afford lasting happiness. A disagreeable rich devil, the devil himself could not have tempted me to marry, but I have really found a lasting comfort in having married (something against my inclination) a virtuous, good-tempered woman, with a little independent fortune, to which we could fly should all other dependencies fail, and live decently without being obliged to anyone.’

It is interesting to consider this philosophy in the light of what was to come. There were no children.

Doubtless before this morning Greville had explained to his uncle his predicament. He was not tired of Emma, but the expense, little as it was, of the establishment had become burdensome, and particularly it was time that he should marry. He had in mind the second daughter of a lord, with twenty thousand pounds. But Emma stood in the path of his ambition. And furthermore, if his childless, widowed uncle should remarry, Greville, his heir, would suffer the inevitable consequences. The solution seemed obvious.

She ran into the room and stopped abruptly as her wide gray eyes caught sight of the tall, distinguished man who stood there. She wore a white dress with a wide blue sash, and the hat of yellow straw was tied beneath her chin with a blue ribbon. Her forehead was broad and low, her mouth ‘beautiful and uncommon’; her hair, which when unbound fell to her heels, was a warm auburn. A locket of it lies on the table beside me as I write, and the glint still lingers in its soft fineness. On the folded paper that encloses it is written ‘To my dear, dear Sir William.’ The date is two

years later than the day on which they met. She was then twenty-one. Almost a hundred and fifty years ago. So they met, and it was not long before the elderly ambassador succumbed to her girlish charms. Trusting, and strangely innocent for one who had already felt the sharp edge of life, she fell a ready victim to Greville's plans. Never again would she see the little house where she had felt peace and security. The Italian visit became a reality.

She loved Greville. Never in her life save once was she unfaithful in her loves. And when the trap was sprung and she found herself in Naples, a 'guest' in the house of Sir William, and realized that Greville would not return for her, although he had promised, her love for him turned for a time almost to hatred, and instinctively she began to appreciate the considerate gentleness of the man who had tricked her but now befriended her.

II

In Naples the ambassador of England lived royally; the young captain of infantry had prospered with the passing years. In addition to the small fortune he had inherited from his wife, he had received other bequests of considerable proportions. He was now a gentleman of fortune, and he dispensed it with lavish hand. Living for years in the glittering diplomatic circles of his age, he had become interested in a wide variety of subjects. His ready ear was trained in musical appreciation. He was a capital shot and an excellent horseman. In art and archæology he was an authority, and his collections of paintings and Etruscan vases were widely known. Moreover, he had written and published volumes that may be seen to-day, on early Italian pottery and on his

investigations of volcanoes. Since he combined these many pursuits with a natural inclination to gallantry and an immediate popularity among all who met him, it is small wonder that there is little mention of his diplomatic achievements until Emma inspired him to effort. Nor is it surprising that the girl of twenty-two, with no inherent inhibitions, should surrender to her cavalier.

For three years Emma lived under the roof of Sir William in a relationship that only those more liberal times and particularly the loose morality of the Neapolitan court would tolerate. In 1791, Emma and Sir William Hamilton were married. She was twenty-eight; he was sixty-one. As her rich and passionate nature had made possible an adoring fidelity to Greville, so now she gave a more mature but equally loyal devotion to her husband. To Sir William the end of a long and picturesque career was at hand; life itself was nearing the end. But in the companionship of a young and beautiful woman he thrust back the years and lived a young husband to his wife.

Often, I imagine, he planned for that final chapter so near at hand. A time would come when, freed from the duties of diplomatic life, he would retire to live within his ample means in some quiet place in the English countryside; to fish, to dream, to see a few friends, and to sun himself in the warm presence of his youthful wife. Kindly, trusting, and sentimental, such must have been the thoughts that sometimes came to him as he rode beside his friend, the King of Naples, or watched his wife in the graceful performance of her celebrated 'attitudes.' Perhaps her letters when he was hunting with the King at Persano assured him of her unwavering loyalty. Her hand is now more experienced with the pen; it is a good

hand; and the large sheets of crisp blue paper are filled with the well-spaced lines. 'I am sorry you had bad sport,' she writes, 'and I shall be most happy to see you at home, to warm you with my kisses, and comfort you with my smiles and good humor, and oblige you by my attentions, which will be the constant pleasure of, my dear Sir William, your affectionate Emma.'

Then came Nelson. A first meeting some years before had been brief and apparently left little impression. To Emma her husband wrote: 'The Captain I am about to introduce you to is a little man and far from handsome, but he will live to be a great man.' Now from his victory over Bonaparte's fleet at the Nile he returned to Naples. He was a hero, the savior of Naples, and he was weak and wounded. In a lengthy four-page letter Sir William sent his congratulations. 'You may well conceive, My dear Sir,' he wrote in part, 'how happy Emma and I are in the reflection that it is you, Nelson, our bosom friend, that has done such wondrous good in having humbled these proud robbers and vain boasters.' Nelson was weak with wounds and fever. In the house of Sir William he found adulation and the tender ministering hands of a lovely woman. Admiral Horatio Nelson was thirty-nine, Emma was thirty-five, and Sir William had passed sixty-eight.

To the old Englishman the hero of the Nile appeared no less glorious than to the impressionable Emma. Not only had his destruction of the French fleet given temporary security to Naples, but it had added to England's long list of victories over her eternal enemy, France, another of the greatest magnitude. Gladly Sir William opened his house to England's hero. Brief was the visit, but in those few tense days two relationships began to take

definite direction: between Emma and Horatio Nelson was begun that more than friendship which was to endure until Trafalgar, and between Sir William Hamilton and Nelson was now firmly established that friendship which, on Sir William's side at least, remained loyal and unwavering to the moment of his death.

On Sir William's Order of the Bath are the words *Tria juncta in uno*, and as one inseparable the three seemed destined from now on to appear. On the flight of the Neapolitan King and Queen to Palermo it was Nelson's ship that transported the Hamiltons. How much his infatuation influenced the hero of the Nile to focus his activities on the affairs of Naples will never be known. At least there has never been question of the sincerity of his action. At Palermo, Nelson and the Hamiltons shared a house together, and Nelson paid his full part of the expenses. To the aging diplomat I believe there had come as yet no suspicion of the ripening interest between these two people whom he held most dear. Bred in a school, in which he himself had been an apt pupil, where suspicion was ever more reasonable than confidence, he seems to have been blind to what passed on before his eyes. With each day his regard for Nelson deepened, nor was there any lessening of his open devotion to his wife.

III

The Neapolitan drama ended with Sir William's recall to London, and together the Hamiltons and Nelson made a triumphal progress through Europe to England. In England the ovation was tremendous, and from Yarmouth to London it was a triumphal progress. On a Sunday morning the three entered London. In the carriage were Nelson, Emma, and the

aging lord. Emotionally aroused by the reception to the country's hero, from which his young wife caught reflected lustre, the old man basked in their effulgence. What if there were ill-mannered rumors? Let his very presence and his open affection for Nelson confound them. And if there might be some truth in this hint of scandal? Perhaps; but he was old — an old and tired man who would be at peace with the world. Emma and Nelson were young. With the weighed evaluation of the diplomat he dismissed the thought and closed his weary eyes.

At Nero's hotel met Nelson and his wife. Rumor had doubtless reached her of the young and beautiful wife of Lord Hamilton and her Nelson fervor. Stories were revived of Emma's earlier life. The prim, dutiful, unemotional, and uninspiring woman looked through cold eyes. She did not close them to what she saw. There were a few meetings; brief notes followed. Then all between man and wife was over. She did not surrender to her victorious rival; with the dignity of her birth and breeding she withdrew from a situation become intolerable.

That London refused to accept Emma seems to have been less disconcerting to Lord Hamilton than to Nelson. To the older man the peace of the country beckoned. But for a while yet the three tarried in London, and there in the Hamilton-Nelson house at 23 Piccadilly, while Nelson was again at sea, was born to Lady Hamilton a daughter, Horatia. Closed, indeed, and now consciously, must have been the eyes of the old man, although Emma played her part boldly and well. More and more strongly the country with its fields and streams called to him; there he might find the peace that he desired. Were he to open those closed eyes he would find himself alone;

better to act the shield to his wife's virtue and the honor of his friend. At sea Nelson received the news of his parenthood with joy.

'Out of your house I have no home,' wrote Nelson to Emma. Now a new and glorious victory, the battle of Copenhagen, was emblazoned on his shield. He returned to provide a home for the Hamiltons. At Merton Emma had found the haven of her husband's desire and a home that would be Nelson's own. The expenses were jointly shared by Nelson and Hamilton. On the week's statement which is before me such items as these occur, under the dates October 4 to 11, 1802:—

Mr. Haines, poulterer	£7	9s.	6d.
Mrs. Perry, pastry cook	£17	10s.	9d.
Mr. Greenfield, butcher at Merton	£8	12s.	10d.
Mr. Footlit, for malt, hops, etc.	£18	15s.	
Mr. Stone, brandy merchant	£13	1s.	

The total for these and other items for the week's expenses is £111 13s. 4d.

Perhaps there was not the rustic simplicity that Hamilton craved. Before Nelson returned, and while Emma was still preparing the house, Hamilton wrote to him: 'I know her merit, have a great opinion of the head and heart God Almighty has been pleased to give her, but a seaman alone could have given a fine woman full power to choose and fit up a residence for him without seeing it himself.' There is kindly intimation here of extravagance soon to follow; but more striking is the candor of the simple words. The eyes were closed, but not the lips.

Only a few months of life remained. 'I am arrived at the age,' wrote Hamilton, 'when some repose is really necessary, and I promised myself a quiet home, and although I was sensible, and I said so when I married, that I should be superannuated when

my wife would be in her full beauty and vigor of youth; that time is arrived; and we must make the best of it for the comfort of both parties.' And to her he writes: 'I know and admire your talents and many excellent qualities, but I am not blind to your defects, and confess having many myself; therefore, let us bear and forbear, for God's sake.'

Here in pleasant Merton, with its trees, a brook, the shade of arbors, and a spacious house, the failing man should have found the peace he sought at how great a price. His wife's expenditures brought forth no criticism; it was her restless energy that now fatigued him. They had gone to the seashore in the heat of summer, and, wearied by the crowds, he had pleaded with her to return to the solitude of Merton. On a bit of paper in her great scrawling characters she wrote: —

'As I see it is a pain to you to remain here, let me beg of you to fix your time for going. Weather I dye in Piccadilly or any other spot in England 't is the same to me but I remember the time when you wished for tranquillity but now all visiting and bustle is your liking. However, I will do what you please, being ever your affectionate and obedient E. H.'

On the back of the page, in his now fluttering hand, he answered: —

'I neither love bustle nor great company, but I like some employment and diversion. I have but a very short time to live and every moment is precious to me. I am in no hurry and am exceedingly glad to give every satisfaction to our best friend, our

Dear Lord Nelson. The question then is what we can best do that all may be perfectly satisfied. Sea bathing is useful to your health; I see it is and wish you to continue it a little longer, but I must confess that I regret whilst the season is favourable that I cannot enjoy my favourite amusement of quiet fishing. I care not a pin for the great world and am attached to no one as much as to you. W. H.'

And with a woman's final word she came back at him again: 'I go when you tell me the coach is ready.' And he replied: 'This is not a fair answer to a fair confession of mine.'

For a year he enjoyed the rural peace; but his strength was fast failing him. Blind apparently in word and deed to his wife's deceptions, he preserved to the end his loyalty to his friend. From a letter of Lord Nelson, written on April 6, 1808, I quote: 'Our dear Sir William died at 10 minutes past Ten this morning in Lady Hamilton's and my arms without a sigh or struggle. . . .' And in her hand may be read: 'April 6. Unhappy day for the forlorn Emma. Ten minutes past ten dear blessed Sir William left me.'

Sir William was buried by the side of his first wife, and, until the day of Trafalgar, Nelson and Lady Hamilton lived on at Merton. Then on that memorable morning died Nelson; and Emma and the little Horatia were alone in a world that turned a shoulder coldly and looked away. A few tragic years of debt and poverty, and then the end in a lonely garret in Calais, France. Only the pathetic child to survive this mad wreck of human destinies.

THE NOVELS OF E. M. FORSTER

BY VIRGINIA WOOLF

I

THERE are many reasons which should prevent one from criticizing the work of contemporaries. Besides the obvious uneasiness — the fear of hurting feelings — there is too the difficulty of being just. Coming out one by one, their books seem like parts of a design which is slowly uncovered. Our appreciation may be intense, but our curiosity is even greater. Does the new fragment add anything to what went before? Does it carry out our theory of the author's talent, or must we alter our forecast? Such questions ruffle what should be the smooth surface of our criticism and make it full of argument and interrogation. With a novelist like Mr. Forster this is specially true, for he is in any case an author about whom there is considerable disagreement. There is something baffling and evasive in the very nature of his gifts. So, remembering that we are at best only building up a theory which may be knocked down in a year or two by Mr. Forster himself, let us take Mr. Forster's novels in the order in which they were written, and tentatively and cautiously try to make them yield us an answer.

The order in which they were written is indeed of some importance, for at the outset we see that Mr. Forster is extremely susceptible to the influence of time. He sees his people much at the mercy of those conditions which change with the years. He is acutely conscious of the bicycle and of the motor car; of

the public school and of the university; of the suburb and of the city. The social historian will find his books full of illuminating information. In 1905 Lilia learned to bicycle, coasted down the High Street on Sunday evening, and fell off at the turn by the church. For this she was given a talking to by her brother-in-law which she remembered to her dying day. It is on Tuesday that the housemaid cleans out the drawing-room at Sawston. Old maids blow into their gloves when they take them off. Mr. Forster is a novelist, that is to say, who sees his people in close contact with their surroundings. And therefore the color and constitution of the year 1905 affect him far more than any year in the calendar could affect the romantic Meredith or the poetic Hardy. But we discover as we turn the page that observation is not an end in itself; it is rather the goad, the gadfly driving Mr. Forster to provide a refuge from this misery, an escape from this meanness. Hence we arrive at that balance of forces which plays so large a part in the structure of Mr. Forster's novels. Sawston implies Italy; timidity, wildness; convention, freedom; unreality, reality. These are the villains and heroes of much of his writing. In *Where Angels Fear to Tread* the disease, convention, and the remedy, nature, are provided if anything with too eager a simplicity, too simple an assurance, but with what a freshness, what a

charm! Indeed it would not be excessive if we discovered in this slight first novel evidence of powers which only needed, one might hazard, a more generous diet to ripen into wealth and beauty. Twenty-two years might well have taken the sting from the satire and shifted the proportions of the whole. But, if that is to some extent true, the years have had no power to obliterate the fact that, though Mr. Forster may be sensitive to the bicycle and the duster, he is also the most persistent devotee of the soul. Beneath bicycles and dusters, Sawston and Italy, Philip, Harriet, and Miss Abbott, there always lies for him — it is this which makes him so tolerant a satirist — a burning core. It is the soul; it is reality; it is truth; it is poetry; it is love; it decks itself in many shapes, dresses itself in many disguises. But get at it he must; keep from it he cannot. Over brakes and byres, over drawing-room carpets and mahogany sideboards, he flies in pursuit. Naturally the spectacle is sometimes comic, often fatiguing; but there are moments — and his first novel provides several instances — when he lays his hands on the prize.

Yet, if we ask ourselves upon which occasions this happens and how, it will seem that those passages which are least didactic, least conscious of the pursuit of beauty, succeed best in achieving it. When he allows himself a holiday — some phrase like that comes to our lips; when he forgets the vision and frolics and sports with the fact; when, having planted the apostles of culture in their hotel, he creates airily, joyfully, spontaneously, Gino the dentist's son sitting in the café with his friends, or describes — it is a masterpiece of comedy — the performance of *Lucia di Lammermoor*, it is then that we feel that his aim is achieved. Judging, therefore, on the evidence of this

first book, with its fantasy, its penetration, its remarkable sense of design, we should have said that once Mr. Forster had acquired freedom, had passed beyond the boundaries of Sawston, he would stand firmly on his feet among the descendants of Jane Austen and Peacock. But the second novel, *The Longest Journey*, leaves us baffled and puzzled. The opposition is still the same: truth and untruth; Cambridge and Sawston; sincerity and sophistication. But everything is accentuated. He builds his Sawston of thicker bricks and destroys it with stronger blasts. The contrast between poetry and realism is much more precipitous. And now we see much more clearly to what a task his gifts commit him. We see that what might have been a passing mood is in truth a conviction. He believes that a novel must take sides in the human conflict. He sees beauty — none more keenly; but beauty imprisoned in a fortress of brick and mortar whence he must extricate her. Hence he is always constrained to build the cage — society in all its intricacy and triviality — before he can free the prisoner. The omnibus, the villa, the suburban residence, are an essential part of his design. They are required to imprison and impede the flying flame which is so remorselessly caged behind them. At the same time, as we read *The Longest Journey* we are aware of a mocking spirit of fantasy which flouts his seriousness. No one seizes more deftly the shades and shadows of the social comedy; no one more amusingly hits off the comedy of luncheon and tea party and a game of tennis at the rectory. His old maids, his clergy, are the most lifelike we have had since Jane Austen laid down the pen. But he has into the bargain what Jane Austen had not — the impulses of a poet. The neat surface is always being thrown into disarray by an outburst of

lyric poetry. Again and again in *The Longest Journey* we are delighted by some exquisite description of the country; or some lovely sight — like that when Rickie and Stephen send the paper boats burning through the arch — is made visible to us forever. Here, then, is a difficult family of gifts to persuade to live in harmony together: satire and sympathy; fantasy and fact; poetry and a prim moral sense. No wonder that we are often aware of contrary currents that run counter to each other and prevent the book from bearing down upon us and overwhelming us with the authority of a masterpiece. Yet if there is one gift more essential to a novelist than another it is the power of combination — the single vision. The success of the masterpieces seems to lie not so much in their freedom from faults — indeed we tolerate the grossest errors in them all — but in the immense persuasiveness of a mind which has completely mastered its perspective.

II

We look then, as time goes on, for signs that Mr. Forster is committing himself; that he is allying himself to one of the two great camps to which most novelists belong. Speaking roughly, we may divide them into the preachers and the teachers, headed by Tolstoi and Dickens, on the one hand, and the pure artists, headed by Jane Austen and Turgenev, on the other. Mr. Forster, it seems, has a strong impulse to belong to both camps at once. He has many of the instincts and aptitudes of the pure artist (to adopt the old classification) — an exquisite prose style, an acute sense of comedy, a power of creating characters in a few strokes which live in an atmosphere of their own; but he is at the same time highly conscious of a message. Behind

the rainbow of wit and sensibility there is a vision which he is determined that we shall see. But his vision is of a peculiar kind and his message of an elusive nature. He has no great interest in institutions. He has none of that wide social curiosity which marks the work of Mr. Wells. The divorce law and the poor law come in for little of his attention. His concern is with the private life; his message is addressed to the soul. 'It is the private life that holds out the mirror to infinity; personal intercourse, and that alone, that ever hints at a personality beyond our daily vision.' Our business is not to build in brick and mortar, but to draw together the seen and the unseen. We must learn to build the 'rainbow bridge' that should connect the prose in us with the passion. Without it we are meaningless fragments, half monks, half beasts.' This belief that it is the private life that matters, that it is the soul that is eternal, runs through all his writing. It is the conflict between Sawston and Italy in *Where Angels Fear to Tread*; between Rickie and Agnes in *The Longest Journey*; between Lucy and Cecil in *A Room with a View*. It deepens, it becomes more insistent as time passes. It forces him on from the lighter and more whimsical short novels past that curious interlude, *The Celestial Omnibus*, to the two large books, *Howards End* and *A Passage to India*, which mark his prime.

But before we consider those two books let us look for a moment at the nature of the problem he sets himself. It is the soul that matters; and the soul, as we have seen, is caged in a solid villa of red brick somewhere in the suburbs of London. It seems, then, that if his books are to succeed in their mission his reality must at certain points become irradiated; his brick must be lit up; we must see the whole building saturated

with light. We have at once to believe in the complete reality of the suburb and in the complete reality of the soul. In this combination of realism and mysticism his closest affinity is, perhaps, with Ibsen. Ibsen has the same realistic power. A room is to him a room, a writing table a writing table, and a waste-paper basket a waste-paper basket. At the same time, the paraphernalia of reality have at certain moments to become the veil through which we see infinity. When Ibsen achieves this, as he certainly does, it is not by performing some miraculous conjuring trick at the critical moment. He achieves it by putting us into the right mood from the very start and by giving us the right materials for his purpose. He gives us the effect of ordinary life, as Mr. Forster does, but he gives it us by choosing a very few facts and those of a highly relevant kind. Thus when the moment of illumination comes we accept it implicitly. We are neither roused nor puzzled; we do not have to ask ourselves, What does this mean? We feel simply that the thing we are looking at is lit up, and its depths revealed. It has not ceased to be itself by becoming something else.

Something of the same problem lies before Mr. Forster — how to connect the actual thing with the meaning of the thing and to carry the reader's mind across the chasm which divides the two without spilling a single drop of its belief. At certain moments on the Arno, in Hertfordshire, in Surrey, beauty leaps from the scabbard, the fire of truth flames through the crusted earth; we must see the red brick villa in the suburbs of London lit up. But it is in these great scenes which are the justification of the huge elaboration of the realistic novel that we are most aware of failure. For it is here that Mr. Forster makes the change from realism to symbolism; here that the object

which has been so uncompromisingly solid becomes, or should become, luminously transparent. He fails, one is tempted to think, chiefly because that admirable gift of his for observation has served him too well. He has recorded too much and too literally. He has given us an almost photographic picture on one side of the page; on the other he asks us to see the same view transformed and radiant with eternal fires. The bookcase which falls upon Leonard Bast in *Howards End* should perhaps come down upon him with all the dead weight of smoke-dried culture; the Marabar caves should appear to us not real caves but, it may be, the soul of India. Miss Quested should be transformed from an English girl on a picnic to arrogant Europe straying into the heart of the East and getting lost there. We qualify these statements, for indeed we are not quite sure whether we have guessed aright. Instead of getting that sense of instant certainty which we get in *The Wild Duck* or in *The Master Builder*, we are puzzled, worried. What does this mean? we ask ourselves. What ought we to understand by this? And the hesitation is fatal. For we doubt both things — the real and the symbolical: Mrs. Moore, the nice old lady, and Mrs. Moore, the sibyl. The conjunction of these two different realities seems to cast doubt upon them both. Hence it is that there is so often an ambiguity at the heart of Mr. Forster's novels. We feel that something has failed us at the critical moment; and instead of seeing, as we do in *The Master Builder*, one single whole we see two separate parts.

The stories collected under the title of *The Celestial Omnibus* represent, it may be, an attempt on Mr. Forster's part to simplify the problem which so often troubles him of connecting the prose and poetry of life. Here he admits

definitely if discreetly the possibility of magic. Omnibuses drive to Heaven; Pan is heard in the brushwood; girls turn into trees. The stories are extremely charming. They release the fantasticality which is laid under such heavy burdens in the novels. But the vein of fantasy is not deep enough or strong enough to fight single-handed against those other impulses which are part of his endowment. We feel that he is an uneasy truant in fairyland. Behind the hedge he always hears the motor horn and the shuffling feet of tired wayfarers, and soon he must return. One slim volume indeed contains all that he has allowed himself of pure fantasy. We pass from the freakish land where boys leap into the arms of Pan and girls become trees to the two Miss Schlegels, who have an income of six hundred pounds apiece and live in Wickham Place.

III

Much though we may regret the change, we cannot doubt that it was right. For none of the books before *Howards End* and *A Passage to India* altogether drew upon the full range of Mr. Forster's powers. With his queer and in some ways contradictory assortment of gifts, he needed, it seemed, some subject which would stimulate his highly sensitive and active intelligence, but would not demand the extremes of romance or passion; a subject which gave him material for criticism, and invited investigation; a subject which asked to be built up of an enormous number of slight yet precise observations, capable of being tested by an extremely honest yet sympathetic mind; yet, with all this, a subject which when finally constructed would show up against the torrents of the sunset and the eternities of night with a symbolical significance. In *Howards*

End the lower middle, the middle, the upper middle classes of English society are so built up into a complete fabric. It is an attempt on a larger scale than hitherto, and, if it fails, the size of the attempt is largely responsible. Indeed, as we think back over the many pages of this elaborate and highly skillful book, with its immense technical accomplishment, and also its penetration, its wisdom, and its beauty, we may wonder in what mood of the moment we can have been prompted to call it a failure. By all the rules, still more by the keen interest with which we have read it from start to finish, we should have said success. The reason is suggested perhaps by the manner of one's praise. Elaboration, skill, wisdom, penetration, beauty — they are all there, but they lack fusion; they lack cohesion; the book as a whole lacks force. Schlegels, Wilcoxes, and Basts, with all that they stand for of class and environment, emerge with extraordinary verisimilitude, but the whole effect is less satisfying than that of the much slighter but beautifully harmonious *Where Angels Fear to Tread*. Again we have the sense that there is some perversity in Mr. Forster's endowment so that his gifts in their variety and number tend to trip each other up. If he were less scrupulous, less just, less sensitively aware of the different aspects of every case, he could, we feel, come down with greater force on one precise point. As it is, the strength of his blow is dissipated. He is like a light sleeper who is always being woken by something in the room. The poet is twitched away by the satirist; the comedian is tapped on the shoulder by the moralist; he never loses himself or forgets himself for long in sheer delight in the beauty or the interest of things as they are. For this reason the lyrical passages in his books, often of great beauty in themselves, fail of their due

effect in the context. Instead of flowering naturally — as in Proust, for instance — from an overflow of interest and beauty in the object itself, we feel that they have been called into existence by some irritation, are the effort of a mind outraged by ugliness to supplement it with a beauty which, because it originates in protest, has something a little febrile about it.

Yet in *Howards End* there are, one feels, in solution all the qualities that are needed to make a masterpiece. The characters are extremely real to us. The ordering of the story is masterly. That indefinable but highly important thing, the atmosphere of the book, is alight with intelligence; not a speck of humbug, not an atom of falsity is allowed to settle. And again, but on a larger battlefield, the struggle goes forward which takes place in all Mr. Forster's novels — the struggle between the things that matter and the things that do not matter, between reality and sham, between the truth and the lie. Again the comedy is exquisite and the observation faultless. But again, just as we are yielding ourselves to the pleasures of the imagination, a little jerk rouses us. We are tapped on the shoulder. We are to notice this, to take heed of that. Margaret or Helen, we are made to understand, is not speaking simply as herself; her words have another and a larger intention. So, exerting ourselves to find out the meaning, we step from the enchanted world of imagination, where our faculties work freely, to the twilight world of theory, where only our intellect functions dutifully. Such moments of disillusionment have the habit of coming when Mr. Forster is most in earnest, at the crisis of the book, where the sword falls or the bookcase drops. They bring, as we have noted already, a curious insubstantiality into the 'great scenes' and the important

figures. But they absent themselves entirely from the comedy. They make us wish, foolishly enough, to dispose Mr. Forster's gifts differently and to restrict him to write comedy only. For directly he ceases to feel responsible for his characters' behavior, and forgets that he should solve the problem of the universe, he is the most diverting of novelists. The admirable Tibby and the exquisite Mrs. Munt in *Howards End*, though thrown in largely to amuse us, bring a breath of fresh air in with them. They inspire us with the intoxicating belief that they are free to wander as far from their creator as they choose. Margaret, Helen, Leonard Bast, are closely tethered and vigilantly overlooked lest they may take matters into their own hands and upset the theory. But Tibby and Mrs. Munt go where they like, say what they like, do what they like. The lesser characters and the unimportant scenes in Mr. Forster's novels thus often remain more vivid than those with which, apparently, most pain has been taken. But it would be unjust to part from this big, serious, and highly interesting book without recognizing that it is an important if unsatisfactory piece of work which may well be the prelude to something as large but less anxious.

IV

Many years passed before *A Passage to India* appeared. Those who hoped that in the interval Mr. Forster might have developed his technique so that it yielded rather more easily to the impress of his whimsical mind and gave freer outlet to the poetry and fantasy which play about in him were disappointed. The attitude is precisely the same four-square attitude which walks up to life as if it were a house with a front door, puts its hat on the table in the hall, and proceeds to visit

all the rooms in an orderly manner. The house is still the house of the British middle classes. But there is a change from *Howards End*. Hitherto Mr. Forster has been apt to pervade his books like a careful hostess who is anxious to introduce, to explain, to warn her guests of a step here, of a draft there. But here, perhaps in some disillusionment both with his guests and with his house, he seems to have relaxed these cares. We are allowed to ramble over this extraordinary continent almost alone. We notice things, about the country especially, spontaneously, accidentally almost, as if we were actually there; and now it was the sparrows flying about the pictures that caught our eyes, now the elephant with the painted forehead, now the enormous but badly designed ranges of hills. The people too, particularly the Indians, have something of the same casual, inevitable quality. They are not perhaps quite so important as the land, but they are alive; they are sensitive. No longer do we feel, as we used to feel in England, that they will be allowed to go only so far and no further lest they may upset some theory of the author's. Aziz is a free agent. He is the most imaginative character

that Mr. Forster has yet created, and recalls Gino the dentist in his first book, *Where Angels Fear to Tread*. We may guess indeed that it has helped Mr. Forster to have put the ocean between him and Sawston. It is a relief, for a time, to be beyond the influence of Cambridge. Though it is still a necessity for him to build a model world which he can submit to delicate and precise criticism, the model is on a larger scale. The English society, with all its pettiness and its vulgarity and its streak of heroism, is set against a bigger and a more sinister background. And though it is still true that there are ambiguities in important places, moments of imperfect symbolism, a greater accumulation of facts than the imagination is able to deal with, it seems as if the double vision which troubled us in the earlier books was in process of becoming single. The saturation is much more thorough. Mr. Forster has almost achieved the great feat of animating this dense, compact body of observation with a spiritual light. The book shows signs of fatigue and disillusionment; but it has chapters of clear and triumphant beauty, and above all it makes us wonder, What will he write next?

AN EXTRA IN HOLLYWOOD

BY AMY S. JENNINGS

I

MOTION pictures are no longer a stunt, an optical juggling act to divert the crowd; they are an art — the most difficult and nerve-racking of all the arts to practise, but one of the most complete and satisfactory modes of human expression yet found. King Vidor's 'The Big Parade,' Murnau's 'The Last Laugh,' Von Stroheim's 'Greed,' Victor Seastrom's 'The Scarlet Letter,' Edwin Carewe's 'Resurrection,' are all of them serious works of art, and some of them masterpieces.

One reason that the movies have been so long unrecognized as an art is that we cannot think of a work of art except as produced by the brain and heart of an artist. And who is the artist who makes a moving picture? A moving picture, like an opera, is a coöperative production, but the really responsible artist is the director. Richard Wagner was considered a superman because he wrote his dramas, composed the music for a hundred voices human and orchestral, drew all these elements together in the creation of tremendous human emotion, and finally conducted the stage presentation. Yet his work is almost child's play compared to that of a picture director.

For a long time men have toyed with the idea of creating life; *R.U.R.* and other recent plays and books deal again with this theme. We speak of characters created by an author or a

dramatist, but the moving picture, more than any other art, makes characters and emotions live and grow before our very eyes. It is not uncommon to see people in a picture theatre cry, start in terror, or shrink back in fear and loathing; and the creation of such emotion in the hard-headed modern crowd is effected by the director through such herculean labors as the layman would scarcely believe.

Most artists conceive an idea, visualize or oralize it, work it out, and reduce it to paper, canvas, notes, stone, or whatever they happen to work in. The picture director goes further. After his idea is visualized and reduced to paper, he proceeds to give it life in its actual materials of men, horses, deserts, oceans, and so forth, and finally reduces it a second time, to the medium of film. It is as if an artist were to paint a picture, after which all the characters came to life and began to argue with the painter. Saint Peter, not liking his rough beard, would trim it to a pointed Vandyke. There would be endless discussions as to costume; the back-row angels would try to work themselves into the front; and, after waiting three months for Saint Peter's beard to grow again, it would develop that the Christ Child had grown too big for the space allotted to him, and another child would have to be procured. Finally all the characters would group themselves more or less as before, and by some magic art,

as difficult in technique as the original painting, they would be eternally fixed, yet living, within their frame. What artist under such conditions would not go raving mad? And the director is no less temperamental, no less artistic or passionate in his creative urge, than the artist of the palette.

II

For some unknown reason journalists have described directors as casual creatures, running round in 'plus fours' of impossible design, 'working' from ten to three, golfing, bathing, and drinking the rest of the time. But I will let you into the secret. The average director has to have and employ the faculties of an army general, a sewer digger, a tight-rope walker, a tropical and arctic explorer, a schoolmaster, a shyster lawyer, an East Side bargain hunter, an ambassador, a heartless Moloch, and an emotional woman. He probably gets up at seven and drives to the studio about eight.

Say he has to go on location that day. He is 'shooting' some scenes at an out-of-the-way house where the hero is hiding. The townspeople are approaching the house, threatening to lynch the hero, who has publicly stated some unpleasant truths about them.

The director sees his three or four hundred extras comfortably seated in buses, the props, cameras, box lunches, and drinks stowed away, the horses packed in trailers. His assistants, property boys, and camera men report to him that everything is O. K. and off they go. Arrived at the house, the director has to turn a mass of joking men and women into an angry, menacing crowd. He shouts at them through his megaphone, he insults them, exhorts them, cajoles them. He is by turns an army mule driver and

an evangelist. He gesticulates, prances, screams. He sends his assistants rushing hither and thither. Long ago he took off his coat, rolled up his shirt sleeves, and threw his tie away. (The tie is rescued from the woodpile by a prop boy who will later be held accountable for the article.) At last the crowd is inspired by the spirit of one man. It sways a little, begins to surge forward as one mass. The cameras are set on the porch of the house where the hero is hiding. The director looks all over carefully. The cameras wait. The assistants cower. The director has decided that the size and menace of the crowd are not shown well enough from such a low angle. The cameras must be moved to the roof of the house. There is no trapdoor to the roof. Well, where is a ladder? There is no ladder. What! That idiot of a prop boy did not bring a couple of ladders in his pocket! The prop boy hastily rigs up a rope and pulley and hauls camera men and director to the roof.

The poor prop boy, by the way, besides bringing with him everything that he is told to bring, is expected to anticipate all possible needs. Naturally he carries black thread, wire, iodine, police badges, false money, prop blood, handcuffs, guns, and rubber knives. Once, out at sea on a small steamer, the director suddenly turned to the prop boy and demanded, 'Where's that piano?' It was the first mention of a piano, but the prop boy never quailed. A packing case and a piece of black velvet photographed like the finest Steinway.

But to return to our director on the housetop. No sooner does he take a look through the lens than he decides they must move still higher, and he commands the prop boy to shift the outfit to the roof of the barn. This does not at all faze the prop boy, who has already foreseen such a move and

called up the local fire department. The brigade is quite pleased to send its hook and ladder—for a consideration—to help out the pictures. Finally, sitting astride the ridgepole, the cameras precariously balanced on the sloping shingles, the director, straining his voice to the limit, inspires a mob at long distance and the scene is begun. Once more the crowd grows menacing, surges forward, is about to break. At the critical moment a small boy sitting on a fence alongside sights a neighbor across the field and runs over to him, straight through the centre of the scene. Curses! Damnation! The crowd stumbles in its stride. The whole thing has to be done over again, and probably again, and again. Nerve-racking grind and tension the whole day long.

Those recently popular pictures laid in or around a steel mill were particularly torturous to make. A steel mill cannot stop even for the movies. All day and all night it roars. The red-hot metal is poured into moulds which are swung on huge derricks across the mill and plunged into tanks of water to cool. Clouds of steam hiss up from these tanks, obscuring the vision. Where to place a camera so as to take all these things and yet be out of the way of the derricks and workmen? A movable platform was constructed on the rafters under the roof, and this was shifted over whatever part of the mill was to be photographed. One of the men of the picture company fell from the platform and was so badly burned that he died in a few hours. There was no cessation of work. Only ten days were allotted to shoot the mill scenes and the company was already behind schedule. But the danger, the incessant noise, and the memory of their comrade's terrible death preyed on the minds of the other members of the company. It was the duty of the

director to keep up their morale, and how could he do this when they sometimes worked for twenty-four hours straight?

Picture people are mostly of the soft-white-collar, city-bred type. Their struggles have been almost entirely with poverty, and they have lived usually by their wits. They are suddenly called upon to face in person the dangers of the pioneers, of the sea, every kind of physical hardship, demanding strength and courage. One sweet young actress who recently carried off a beauty prize and a fat contract was at one time making a jungle picture. Jungle pictures are made in arenas surrounded by high fences hidden with bamboos, palms, and tropical vegetation. The scenes with the animals are usually taken first, with only the trainers in the arena, and later the actors come in and do their bits. For those scenes in which it is essential that actors and animals appear together, naturally every kind of precaution is taken. But certain of the animals are fairly tame and are allowed to wander in the arena even while the actors are present. The actors are instructed how to treat the animals—above all not to run away. This particular young actress entered the arena late—she had been having a little flirtation with her leading man—and was unaware that Patsy, a tame young lioness, was wandering at large. The actress seated herself by a clump of bamboo and proceeded to have her palm read by her (for the moment) devoted admirer, when Patsy sprang out of the bushes and landed in—or rather on—her lap, purring and wagging her tail and expecting to have her head nicely scratched. Fortunately the actress was too terrified to move, and Patsy immediately went to her trainer when she was called. But it is a distinct shock to any civilized

young lady suddenly to find a lion in her lap. It is one of those situations we are not taught how to meet, which make unlimited demands on nervous control and courage.

In the same picture Mary, the chimpanzee, a really dangerous animal always held safely by a wire leash, took a strange fancy to the production manager. After a scene she would run up to him and poke her skinny black hand in his face. 'Kiss it!' the trainer shouted. 'Kiss it, and, whatever you do, don't move!' The manager had to kiss the ape's hand half a dozen times before she was satisfied and consented to return to her work.

It is not only danger and physical difficulty which try the director's nerves. There is the tedious, agonizing grind of getting a close-up just right. Recently a director was taking a famous star as she picked up a cup of tea, laughed slyly over the edge as she drank it, and set it down again. He shot this scene steadily for four days. The cup must be picked up gracefully — held at a particular angle so that the curve of the cup and the curve of the cheek would make an harmonious picture. The smile must be just perfect — not too much of it showing and not too little. For four days star and director labored. Then the company went out on location for a week to shoot some outdoor scenes. On their return to the studio they proceeded with the same cup and smile. I did not happen to be in at the finish and cannot say how long their efforts continued.

Bearing in mind that a good director must of necessity have something of the 'artistic temperament,' it is easy for one to see that the extreme difficulty of handling his medium of expression is apt to drive him to excesses even more than is the case with other artists. And there is certainly no denying that Hollywood indulges in

excesses. Still these excesses are not so terrible or so unusual as the world makes out. After you practise, for hours daily, kissing at your most becoming angle, a kiss really does not mean much to you; and a girl gets so used to having a man's arms around her that they mean little more to her than the arms of a chair. It is not so much the life you live as what it means to you that affects your character, and most of the picture people are generous, natural, kind-hearted folk. If their social eccentricities seem greater than other people's, it is because they do not try to hide them or hush them up — publicity is good business for them.

But to return to the director and his struggle to produce a work of art out of the most stubborn of all materials: men, women, and the world at large. In a majority of pictures there is some tremendous outdoor elemental scene — a flood, fire, shipwreck, earthquake, or volcanic eruption — that is used as a dramatic background to heighten and repeat the human emotion, exactly as it is used in other arts. But here the director has actually to handle the elements. He cannot merely mention that a storm is raging outside. He must show it. Apart from all the clever and ingenious ways of faking elemental drama, in very many cases the director is absolutely at the mercy of the elements as much as any fisherman or farmer.

Take the simplest kind of scene. The girl perhaps walks down to the seashore in the evening. She stands for a second on a rock and looks into the water, thinking. This involves a number of different shots. First the girl is seen walking toward the beach. Then she climbs the rock. Perhaps a close-up of the slippery weed as she mounts. She is outlined against the sky. She looks down. A shot of the water she is looking at. She looks

round at the wide horizon. A shot of birds wheeling, a distant ship or headland. She looks down again at the water. A shot of the man she is thinking of, half seen through the ripples of the water. She leaves the rock and walks down the beach as it grows dark. Now for each of these dozen shots the cameras must be moved, set up, focused. The reflectors must be arranged to throw a beautiful light that will also be becoming to the star. This scene is supposed to be in the evening. It will probably take at least three or four hours to make all the necessary shots. By the time the last one is ready to be taken the shadows are much longer and the tide much higher than when the first one was made. Yet the whole thing will take only a few seconds on the screen, and it is impossible to show the tide at different heights on the rock. Some of the shots, therefore, must be postponed till next day. Next day there happens to be a wind, the sea is rough, and the rock is drenched with spray, whereas the previous evening the water was merely rippling. The day following there is a storm. The fourth day conditions are right, but the tide is at the right height four hours later than it was on the first day and the shadows are all wrong. It may take a week to complete the scene. Of course something else is done in the meanwhile.

This is merely one of the smallest ways in which the elements retard and hinder the director. Sometimes there is real difficulty, as for instance in making 'The Blood Ship,' when the ship, with half the actors aboard, drifted from its mooring in a fog and was lost at sea. It was an old-time hulk with no wireless aboard. Aeroplanes were sent out to find it, but were unable to do anything on account of the fog. The ship was finally discovered the next day.

The stars also add their quota to the director's difficulties. Imagine the director to whom Wallace Reid was not Wallace Reid at all, but a distraught young man about to commit a crime for love. The director prepares everything for the great scene. Lovingly he supervises the lights, the angle of the cameras, the shadow of a spray which shows on the wall against which the distraught young man is to lean, glassy-eyed, wild, nerveless. He turns to put his demoralized hero into the centre of the carefully prepared picture — to find that the young man has started a fierce argument on bacteria with one of the extras, and is at that moment leaping into his car with his friend, intent on going to his private laboratory and proving that he is right. No director on earth can dissuade him — are not bacteria more important than any director? They could make or unmake directors in a single day.

Or consider John Barrymore, who walked off the set in the middle of the day, leaving a couple of hundred extras at \$7.50 apiece per day — not because he was tired especially, but because he knew it had been hard times and the extras needed another day's work. And all this is counted against the poor director. He is supposed to manage the stars, the elements, the company's nerves, and his own temperament so as to save money for the producer and yet make a splendid picture.

III

Picture making is a coöperative art. What the director intends must be carried out by actors, camera men, and the cutter. Naturally these are all subject to the director, but it is pretty difficult to subdue all their personalities entirely to the director's, unless the director is an extraordinarily strong and determined character. Here is a

very simple instance of how a cutter can change a picture. The hero smiles pleasantly and embraces the lady of his choice, after which the doorbell rings and they separate, annoyed at being disturbed. But suppose the cutter cuts it like this: the lovers embrace, the door bell rings, the hero smiles and leaves the lady. Of course you conclude that the hero is a villain and has purposely arranged for someone to disturb them at that time.

Von Stroheim's 'Greed,' perhaps the finest picture he ever made, was forty reels, or eight miles, long when it was finally cut to suit his ideas. It took eight hours to run, and did not seem too long to those who saw it. And indeed there is no reason why one should not have a film festival — like the Wagnerian festivals at Bayreuth — during which long and beautiful films would be shown throughout the day. They could be as thrilling as any opera and probably would appeal to far more people. But naturally eight hours was too long to expect the average crowd to sit. Consequently the picture was cut to seventeen reels, and later to twelve. Imagine the director, heart-broken at seeing his work so cut to pieces and yet trying to preserve some of the essence of his original idea and inspiration.

But here is the greatest obstacle of all in the way of a director's producing a real work of art. Other artists — writers, painters, musicians — are left more or less free to create as they will. Their difficulties begin when they try to market their art. Then they come into contact with all the petty jealousies and politics which Romain Rolland has described so well in *Jean Christophe*, and which seem to exist in every realm of 'art.' But imagine an artist who must actually do his work in these inhospitable surroundings — who must go through endless

ridiculous intrigue before he is even permitted to begin. For of course as soon as the director begins his picture he is speculating in enormous sums of money.

The cheapest home-talent two-reel film can scarcely be made for less than \$800. And the most ordinarily good five-reeler will cost at least from \$10,000 to \$15,000. This immediately puts the making of pictures into the realm of business rather than of art, and in pictures we see an extraordinary struggle between these two proverbial enemies — extraordinary because it so often ends in favor of art rather than of business.

A big studio, like any other big business, is a nest of politics and intrigue. And while it is doubtless true that it is talent and ability which count in the end, in the beginning it is largely influence and pull. And these are not easy to get in any ordinary manner, as the applicants for movie jobs are legion. Every fool seems to think he is capable of directing a picture, and every boy or girl who comes to Hollywood is convinced that he or she is a genius. They do not hesitate to attack directors shooting in the street with requests for jobs — promising to work for nothing if only they are given a chance. Naturally this gets them nowhere. They must at least have a little pull with someone. One director I know holds his present job because of a broken rib his wife sustained in the too hearty embrace of the studio manager. He is a very poor director and will not last long, but at present he is keeping a good man out of work.

Although a director is naturally preferred if he is economical, it is surprising how free a hand is given to those whom the companies believe to be capable artists. Von Stroheim, for instance, is allowed to shoot sequences, taking several weeks, purely for his

own artistic pleasure — since it is evident the censor will never permit them to be shown on the screen. Murnau, in making his recent picture, 'Sunrise,' was given an entirely free hand. No one was even allowed on the lot to see what he was doing, and he permitted no one to see his 'dailies' (the print of the scenes taken each day) but himself. Whatever he asked for was given him, whether it was a peculiar kind of lens, an elephant, or an earthquake. Practically anything a good director desires in the way of props, sets, or locations is arranged almost without question. There is a tremendous amount of waste and graft in renting articles to the picture companies, as few have anything approaching efficiency methods. One company, for instance, paid a jeweler \$25 for the rent of a wrist watch which could have been bought for \$14, and such examples could be multiplied endlessly. Naturally all this intrigue, political nonsense, and business grafting distracts and depresses the artistic director, but he has to go through with it to get and hold his job, and perhaps it adds a touch of realism and irony to his pictures which in no way detracts from their merit.

IV

If I have given some idea of the difficulty of employing moving pictures as an art medium, of the double translation of ideas, first into script, then into film, of the nerve-racking physical labor, the interference of the elements, the problem of managing the stars, the peculiar coöperation necessary between director and cutter, and the incessant political intrigue, you will readily see that it is not only the consideration of the box office which prevents so many pictures from being

works of art. And perhaps you will have some realization of King Vidor's achievement in 'The Big Parade' when he works successfully up to the tremendous scene where the soldiers leave and Renée Adorée tries to cling to her lover — to his boot — to the chain on the truck — to the very wheel tracks in the mud. Perhaps you will also appreciate better the exquisite tenderness of that scene in 'Resurrection' where Edwin Carewe shows Dolores del Rio dreaming of her unborn fatherless child. She stands before the picture of the Virgin and mechanically begins to rock the blanket she is putting away, crooning a little as she sways. And that scene in 'Greed' where Gowland is handcuffed to a corpse in the midst of the desert, the gold he so ardently desired useless at his feet; and that last tremendous long shot which recedes from him and all his crime and passion — recedes — recedes — till we see him and his terrible drama as they perhaps appear to the Creator: a meaningless black speck in an eternal voiceless solitude.

No other art in the world is so difficult to practise, so compounded of antagonistic, inartistic elements. But it has its compensations. The close-up, invented by D. W. Griffith, and the long shot with the wide-angle lens, can throw the audience into the bottom of the grand canyon or bring up before it the veined petals of a wild flower. No other art can create at once with the power and the delicacy of the moving picture; and I can imagine no more satisfying medium for the ambitious artist, who is after all a creator — part archangel, tearing apart and creating worlds with his trump of doom, part monk, embellishing a single letter of the alphabet with all the happy detail of a rich imagination.

THE TRIAL OF STRENGTH

BY MORRIS GRAY, JR.

I

ICE. . . . Ice peaked, twisted, jostled, massed in pressure ridges, ground to crystals — chaotic wastes of it, storm-tossed, endless. High above, the plane, whining, circling, dropped in an even, narrowing spiral to the open lead of black water. With a rush it swept the surface; but a floating pinnacle of ice, much higher than it had looked from above, caught the wing. There was a crash, a powdered splintering; the plane lurched heavily, one wing careening beneath the water, the other wrenched back and sagging.

Slowly, in the bitter wind, it drifted to the edge of the lead. Two men dropped off in the dense rubble of the pack and looked about grimly at the barren white hummocks and toothed spurs which hemmed them in.

'Damned lucky you spotted this open lead, Hank. We'd have been smashed to pulp in the ice.' It was the Captain who spoke, his voice raised harshly to drown the roar of the engines, still pounding in his ears.

Sergeant Phinney, a big hulking man, swung the plane around so as to bring the damaged wing close in over the ice.

'She's done for, all right,' the Captain muttered.

'Looks like it. How far back to the base would you make it, sir?'

'Six hundred miles.'

'Some hop! And the Pole?'

'About a hundred and twenty. I'll take an observation. We may be a bit off the course.'

As they stepped back, a third furlad figure crawled out and lowered himself gingerly, favoring one leg.

'You're hurt, Mason!'

'Knee's wrenched a bit, sir — when the wing struck. Nothing to count.'

But the Captain glanced critically at the young mechanic. 'Take it easy,' he said, 'while the Sergeant and I get up the tent.'

They climbed to the top of a pressure ridge, and looked about. Ice — a continent of it, rigid, ghastly, stretching away in bleak furrowed wastes. Through the débris of smaller scattered stuff, great blocks of old ice reared up, jagged and blue; and over the scarred, contorted plain the sun, poised a hand's breadth above the horizon, cast its pale, merciless light.

The Captain swept the floes with his binoculars. 'We're up against it, right enough. With Mason lamed, we'll have to camp here by the lead and wait.'

Kit and provisions were shifted to the ice and carried to a sheltered spot between the ridges, where the men put up their small tent. There was tinned and concentrated food for a month — tea, pemmican, biscuits, chocolate, condensed milk — and ample fuel for the stove and the small heater.

While a meal was being prepared, the Captain picked his way over to the wrecked plane. Bitterly he contemplated it. What cursed luck! The senior officers had backed him, but it had been his venture, this — a dash by

plane to the Pole. For two years he had planned it, weighed its feasibility from every angle, tested planes and instruments, made nonstop flights of equivalent length under almost similar atmospheric conditions. Any one of those flights would have carried him to the Pole and back. But now, in the real test — disaster. That mad search for a landing place when the controls had begun to loosen. They had swung low over that desolate, mangled world. To land would be annihilation. But, as they lifted again, the Sergeant had spied, a few miles ahead, the open lead. There they could put things to rights and tune up. And then — that cursed piece of floating ice. A foot more and they'd have cleared it.

The base was six hundred miles to the south. And Mason hurt. No hope of fighting their way out on foot. They'd have to stick here by the lead, where the rescuing plane could land. On the sixth day it would start. But to find them in that featureless wilderness, with the compass undependable! Well, there was just a chance.

Gloomily he returned to the tent. Mason was stretched out on the sleeping bags, while the Sergeant, easy and deft in spite of his bulk, crouched by the stove. Hot tea, pressed meat, and biscuits. They ate and lay down to sleep. But the Captain dozed restlessly. Every hour he crawled out into the pale glare and prowled about.

It had been a hazardous, a sporting proposition, this hopping off into the unknown. But he'd had faith in his luck, his star. Faith. What man ever scrutinized the consequences of disaster until disaster was upon him, had become the actuality! It was the other fellow whose luck would fail, not his; it was the other fellow who stopped the bullet, died of cancer. But for him, a special providence.

By the edge of the lead lay the

wrecked plane. And to the north, a hundred miles, the Pole. That strange lure. There was no gold to be found, no claim to stake out; scientific data, of interest to scientists. Greeley, Amundsen, Peary, Scott. It was adventure that drew them. The trial of strength.

As he threw back the flap of the tent, the Sergeant stirred in his sleeping bag and rolled over, like a great shaggy seal. Bit of luck to have the Sergeant with him. Adequate fellow, the Sergeant. Adequate. Mason might not stand the racket. He must see that the man kept quiet and gave his knee a chance.

II

Day followed day, hours indistinguishable one from another in that harsh, uncanny light. Above a fixed point in the horizon the sun never lifted. East, south, west, north, it crept stealthily about the rim of that pitted desolation, like an inflamed, ironic eye. It was there when they lay down to sleep; when they awoke it glowered at them from behind another ice hummock.

They would be getting anxious at the base. They'd wait the allotted time, another twenty-four hours. Still the lead held open. Through the pack about it great crag-like blocks of ice moved slowly, — a cosmic, shrouded dance of dissolution, — while they, with jealous eye, watched the narrow stretch of open water, their hostage against fate. Hourly they paced its length, nursed it, moored at one side the floating fragments.

And they watched. The Captain tensely, the Sergeant undisturbed, as the days passed. He took things in his stride, the Sergeant, joked or swore with the same solid calm. Adequate. When off watch he smoked, cooked, dried and repaired their clothes, and paced the lead, his hoarse rumbling

voice the only sound in that frozen silence. Often he shared the lookout with the Captain, his eyes, clear as a gull's in his heavy stubbly face, strained toward the south.

It was the nineteenth day. 'How about it, sir? Still a chance?'

'Sure. But if they can make it, why are n't they here? The spare planes may be out of commission, for all we know, or smashed up.'

The Captain's eyes burned with watching, with staring over that livid welter of ice. It was as if they had landed on some lifeless, glacial planet lost in space. It was like the prophecy of ultimate death. As if, in the brief term of those nineteen days, a hundred million years had lapsed, chilling the sun, while layer after layer the ice encroached, and they, like sinking embers, the last flickering sparks of life, waited for inexorable extinction.

A few rods away stood the tent, the sole oasis in that inverted hell. Mason was trying to warm himself by hobbling up and down, while the Sergeant dried the sleeping bags. What did they think of things, of him? He'd got them into this. They were hairy and leaner; their brows and tense, bloodshot eyes showed the strain. Had they three been born and reared and trained and brought together to the end that they perish slowly of hunger amid the ice fields? Damn funny!

The Sergeant was waving. Midday. Rations had been cut down to two scant meals, one at noon, the second at midnight, when the sun swung around over the northern horizon.

They ate, and the Captain took up the cards. 'Well, boys,' he said, 'let's have our game.'

They played mechanically, one of them getting up at every deal to search the sky. There was no wind, no crackling in the floes, no sound in that chill, empty stillness save the patter of the

cards and now and then a word. Suddenly Mason threw up his head. With a hoarse cry he flung down the cards, and was running jerkily along the ice.

The Sergeant started up.

'He is n't —'

'By God!'

A faint droning hum, intermittent yet definite.

They sprang for the lookout. Southward, and well up, a dark speck showed clear against the sky. It swam nearer; and with a deafening, choking roar the plane passed overhead and a man leaned out and waved. It circled twice and swept down into the water.

'It's Lieutenant Ridden and Mac!' cried the Captain, as they ran over to the lead.

'The small plane!'

'Yes. It's the small plane.'

They stood silent while it drifted in, and Lieutenant Ridden dropped off and saluted. 'A bit late, I'm afraid.'

The Captain smiled.

'We've combed the ice from here to the base,' the Lieutenant went on hurriedly. 'The big plane is out of commission, and I was held up four days by a gale of wind, and again by fog.'

As the two officers moved aside, the Captain described his own mischance, and together they examined the wrecked plane.

'Can't do anything with her,' muttered the Lieutenant. 'How long a straightaway does the lead give you?'

'Four hundred and ten yards. I've paced it every hour. The small plane could n't lift out with the five of us.'

'We can strip her and try it.'

'Try it? Not much. Four, maybe, — with luck, — but not five. I'll stay behind and, if all goes well, you can come back.'

'That's just it,' said the Lieutenant. 'Not so easy to pick up this spot again, even with the horizon we get in the air. You know what the compass is in these

parts, and fog may shut in. We've only this plane to depend on now. Let's chance it with the five of us.'

Grimly the Captain scanned the open water. 'It's not good enough, Ridden,' he said. 'If you should n't lift, and crashed into the ice over there, we'd all be done for. With four you may make it. It's a legitimate risk, anyway. I'll just have a word with the Sergeant and Mason.'

Slowly the Captain made his way toward the tent, and beckoned to his two companions.

'You're first, Mason,' he said. 'Light as you can, mind. No extra kit. Report to the Lieutenant.'

Collecting his flying garments, Mason limped off. The Captain and the Sergeant were alone.

'Well, Hank.'

'Well, sir.'

'You're next.'

'Sir, that plane can't lift with the five of us. You know that better than me.'

'Stripped, she'll lift four.'

'Four?'

'The Lieutenant will come back for me.'

'The Lieutenant'll come back for you, will he? Does he think he can pick up this point again?'

'He can try it.'

The Sergeant spat. 'Sir, I'm not going.'

For a moment the Captain was silent. 'Hank, you're a thundering good fellow, but this is my show. Go help them strip the plane.'

Sergeant Phinney stood stolid.

'Look here, Hank! I appreciate this. But we're only delaying things. Get a move on. We're still in the Service, you know. Come! Shake hands and beat it.'

A gleam flickered in the Sergeant's eye as he thrust forward his great arm. But instead of grasping the Captain's outstretched hand he caught his

wrist; with a quick, dexterous twist, bent it back. There was a snap.

The Captain sprang away. 'What the devil!'

'You've got to go now, sir. Disabled men first. Military regulation.'

'Damn you, Hank!'

Unperturbed, the Sergeant reached for the medicine kit. 'I'll just bind it up,' he said. 'Learned that trick from a Jap in the Canal Zone. There's only one bone broken.'

No word passed while the bandage was applied.

'Had to do it, sir,' said the Sergeant finally.

'Had to do it, eh?' The bandage was in place. 'Get out, and report in ten minutes.'

Clumsily the Captain filled his pipe and struck a match. Disabled? He was scarcely disabled. But what if Ridden could n't get back? It was possible. Maybe an even chance. By the edge of the lead the four dark figures moved about the plane. They'd have her ready in a minute. From the tank of the wrecked plane the Sergeant was bringing tins of gasoline. At one side, a box of provisions — to be left behind. The Sergeant drew Ridden a little apart. No doubt he was explaining the situation — what he'd done. Curse the Sergeant! Why could n't the man obey orders, disposing of things on his own, as if he were God!

Up and down the Captain paced. Up and down. Grinding under his feet the cards they had cast aside at the first alarm. The ice. . . . That vast white arena. It had got a good many audacious spirits. Through the immensity of snow-covered upheaval, dark seams and fissures showed like purple veins in lumpy, leprous flesh. To the south, the nebulous graying skyline. Beyond that bleak horizon, trees and flowers grew and men lay in the grass. The South. Life. Life. . . .

THOUGHTS AT LUNCH

BY RODERICK MORISON

Fish cakes! And there the fishes play
In blue-green seas and silver spray
Till moonrise goldens all the bay —
Fish cakes!

And in the half-light restless things
Glide by on glinting, glimmering wings,
And the wind sleeps, and sleeping sings,
And wakes —

And O, the wind is singing yet
In golden dawn and golden set
Of sun, though you and I forget!
Fish cakes!

For London shrills 'Forget, forget!' —
Drawing her mantle closer yet,
For cold, gray rain, and dingy, wet
Snowflakes!

And you are but a tale that's told,
And life is full of grim and cold
Policemen, cinemas, and old
Fish cakes!

THE MISSISSIPPI

MEETING A MIGHTY PROBLEM

BY ARTHUR E. MORGAN

I

WHEN Fernando de Soto returned from the West to the great river he had discovered, he found it in flood. La Vega, in an account written about 1580, gives this graphic picture of the Father of Waters before the country was in any way affected by the white man:—

Then God, our Lord, hindered the work with a mighty flood of the great river, which, at that time—about the eighth or tenth of March [of 1543]—began to come down with an enormous increase of water; which in the beginning overflowed the wide level ground between the river and the cliffs; then little by little it rose to the top of the cliffs. [The high vertical banks of the river look like cliffs.] Soon it began to flow over the fields in an immense flood, and as the land was level without any hills there was nothing to stop the inundation.

On the 18th of March of 1543, which that year was Palm Sunday, when the Spaniards were marching in procession, the river entered with ferocity through the gates of the town of Aminoya, and two days later they were unable to go through the streets except in canoes.

The flood was 40 days in reaching its greatest height, which was the 20th of April, and it was a beautiful thing to look upon the sea where there had been fields, for on each side of the river the water extended over twenty leagues of land, and all of this area was navigated by canoes, and nothing was seen but the tops of the tallest trees.

On account of these inundations of the river the people build their houses on the high land, and where there is none, they raise mounds by hand, especially for the houses of the chiefs; the houses are constructed three or four stages above the ground, on thick posts that serve as up-rights, and between up-rights they lay beams for the floors, and above these floors, which are of wood, they make the roof, with galleries around the four sides of the house where they store their food and other supplies, and here they take refuge from the great floods. . . .

By the end of May the river had returned within its banks.

Local tradition has it that the highest flood on the Mississippi in the region from St. Louis to Cairo was in 1785. The next highest in the same region, and this time there are definite records, occurred in 1844, when the primeval forests were largely intact. This year also saw the greatest recorded floods on such widely separated streams as the Illinois River, the Red River in Texas, and the Kaw River in Kansas.

The 1844 flood on the Mississippi was but slightly, if at all, restrained by levees, and the water was free to spread over great areas, yet the stage between St. Louis and Cairo was two feet above that of the great flood of 1927. Confined between levees like those now

along the river, it probably would have reached a stage much above the 1927 crest.

Floods large and small are a natural characteristic of the Mississippi and are not due in any large degree to the actions of men, either in cutting forests, tilling land, or draining swamps. Whether such activities actually increase or decrease floods on the river, no one knows. There probably will be greater floods in the future than have occurred during the white man's occupation. It is an inaccurate statement with which ex-Governor Pinchot begins a most interesting and suggestive article in a recent number of the *Survey*: 'The Mississippi flood is a man-made disaster.' In the same number, ex-Governor Parker of Louisiana makes a similar error: 'Our troubles are due to no carelessness on our part, but largely to deforestation, tile drainage, and the hurling at us, in an irresistible flood, of the waters of our thirty sister states between the Appalachians and the Rockies.' The scientific attitude of accurate observation and correct statement is a good beginning, even for the consideration of public questions. The public mind has been bewildered by biased propaganda on the subject.

Governor Pinchot also remarks, 'Where the river flows and how it flows represents a vast and beautiful natural equilibrium established among them all. When men destroy that equilibrium, naturally they pay the price.' There is no such equilibrium. The continents have been unmade and remade many times, and the process still is going on. The relation of natural river channels to their own flood flows, and to man's use, is entirely accidental. Some rivers have dug channels a hundred times the size necessary to carry their greatest flood flows, as in the case of the Niagara River in the gorge below

the Falls, the Colorado River through the Grand Canyon, and the Hudson above New York City. Others never have made channels large enough. The Miami River in Ohio in its natural condition is nowhere large enough to carry more than a tenth of its extreme flood.

The rivers flowing through the hill country that surrounds the Mississippi coastal plain have cut deep and narrow valleys, but where they leave the hills and enter the plain their channels are completely inadequate. The Black River, which has an extreme flood flow of more than a hundred thousand cubic feet per second in the Missouri hills, on entering the plains has a channel which will carry only three thousand. The Coldwater River of northern Mississippi will occasionally discharge one hundred thousand cubic feet per second through its deep valley in the hills, but on reaching the flat country its channel will carry less than one thousand.

The Little River of Missouri completely loses its channel in the flat woods, though this stream and its branches emerge from the hills with a maximum flood flow of more than one hundred thousand cubic feet per second. Measures for its control have been undertaken, and hundreds of square miles of swampy woods over which it formerly spread are now being turned into fertile farms. Compared with the channels of these tributaries, that of the Mississippi is fairly adequate, since it will carry about a third of the extreme flow.

There is no established equilibrium of nature in the formation of rivers. In the week of creation, man finds himself entering the scene along the lower Mississippi perhaps on Wednesday morning. It is left to him to finish the job and to make over the earth to suit his necessity. Floods like

those on the Mississippi are not penalties for past sins, but a stimulus to his spirit of mastery.

II

Except for that projection into the Gulf which forms the southeastern part of Louisiana, the so-called 'Mississippi Delta,' from southeastern Missouri to the Gulf Coast, is not a true delta, like that of the Yellow River of China, but has a very different geological origin. The Gulf of Mexico formerly extended northward to the mouth of the Ohio River. A few miles southeast of Poplar Bluff, Missouri, five hundred miles from the present Gulf coast, the ancient sand dunes still stand along the shore line of that prehistoric sea. Protected by vegetation, their sides are almost as steep as when the tide cast its spray about them.

Gradually, through the ages, the old bed of the Gulf has been slowly tilting upward, until now the northern portion is more than three hundred feet above sea level, and there is a continuous and fairly uniform slope southward to the present Gulf coast of Louisiana. This tilting is not a uniformly steady motion, but progresses with spasms of activity. Such a period of disturbance along the ancient ocean shore line occurred about a century ago. In the region of southern Missouri, southern Illinois, and western Tennessee, there were about two thousand earthquake shocks from 1811 to 1813. Shaler, the geologist, was of the opinion that this was the most violent disturbance of the earth's crust in recorded human history, and that similar convulsions are certain to recur, at intervals of perhaps a century.

So violent were some of these tremors that two great bodies of water were formed, covering many square miles. Reelfoot Lake in Tennessee, and Big

Lake in the St. Francis Basin of Missouri and Arkansas, are monuments to the 'New Madrid Earthquake.' By such methods the plain of the so-called 'Mississippi Delta' is slowly lifting itself above sea level.

Geologically speaking, the Father of Waters in the coastal plain is a very young and wayward, though a hard-working, river. From the mouth of the Ohio River to the Gulf it has ploughed a very crooked channel for itself. The term 'ploughed' fairly describes the process, for the material removed from the channel has not necessarily been carried to the Gulf. During floods the turbulent water stirs up the sand and mud in the river bed and carries it out over the banks. Within a few miles of the river about as much earth is piled up above the general ground level as would be necessary to fill the river channel.

This description is oversimplified, and gives only a roughly accurate impression of the process.

There is no definite evidence to sustain the popular opinion that the river is building up its bed. The comparison so frequently made between the Mississippi and the Yellow River of China is misleading. The Mississippi flows through a plain that is tilted up hundreds of feet above sea level at its upper end. The Yellow River, on the contrary, flows through a true delta, built up from below sea level by river silt. This silt is carried out to sea, and from there is washed back to shore by the tides and deposited as a flat plain with little or no slope. Except when restrained by levees, the Yellow River wanders over this plain, dropping silt along the way, and so produces what slight slope there is along its lower course.

Moreover, the Yellow River carries as much as ten per cent of its weight of silt, while the Mississippi rarely carries

a fifth of one per cent, and averages less than a fifteenth of one per cent. The Yellow River does build up its bed, but that is no reason for assuming that the Mississippi must do likewise, or that the two problems require the same treatment.

The land along the Mississippi is highest at the river edge, and gradually slopes back about five to seven feet in the first mile, and perhaps ten or twelve feet in the next three or four miles. This description requires detailed modification for various localities. In the lower land back from the river, and ten to thirty miles distant, are smaller streams roughly parallel to the Mississippi. They gather up the local drainage, and finally break through the high bank into the river. Such breaks commonly are near the outlets of the main tributaries. Most of these large tributaries also have high banks, and so the flooded territory naturally divides itself into about six large basins that are natural and semi-independent units, and to a large degree can be protected independently of each other.

III

The first settlers along the Mississippi farmed the high land near the river. The soil was fertile and easily cultivated, whereas the 'buckshot' and 'gumbo' clays in the bottoms back from the river were harder to till. The front lands were better drained and less subject to overflow. Yet overflows did occur, and the planters began to build little levees along the river front. Then neighbors joined their levees together, and after many years levee districts were formed by state laws, with power to tax the lands for construction funds.

Finally the national government established the Mississippi River Commission, composed of army engineers

and civilian appointees, one of its duties being to make surveys and to coördinate the policies of the various districts. Army engineers were stationed at various points along the river to furnish local supervision under direction of the Commission. For a time the federal government gave advice, but furnished no funds for construction, except for bank protection. Then, under the fiction of helping navigation, it began to pay one third of the cost of the levees, and during recent years it has paid two thirds of the cost. A total of about \$240,000,000 has been spent by the local districts and the national government for levees alone.

Half a century ago various persons, most of them without adequate information or training, began agitating for control of the Mississippi by means of reservoirs, auxiliary channels, spillways, and other devices. Most of these schemes were wildly impractical in the form in which they were submitted, and the army engineers entered into a hard fight for 'levees only,' and they won. In eliminating spillways and in trying to hold down the flow of the Atchafalaya River, a natural overflow for the Mississippi, they seem to have made costly mistakes, but they helped otherwise to prevent a vast waste of public funds through the execution of badly conceived plans. Most of the alternative schemes had been presented in such crude form as to destroy any possibility of successful execution, and some of them involved rash expense; whereas, for using the limited funds available, levees were about the best form of investment.

Yet this victory of the army engineers and of the Mississippi River Commission had certain very unfortunate results. The doctrine of 'levees only,' emphasized by a bitter struggle, instead of being considered as a practical

economic expedient became almost a religious dogma, to be implicitly believed on authority, and not to be critically examined. During the past forty years, the Mississippi River Commission has promoted higher and stronger levees; but, in assuming that device to be the one and only solution, they were diverted from making the very extensive and comprehensive studies on which a permanent policy should be based.

During the half century of the Mississippi River Commission a thorough scientific study of the Mississippi problem in general has not been made. These years of golden opportunity have been wasted, and to-day, when the country calls impatiently for a plan of relief, the fundamental facts on which an enduring policy must be based are still to be determined. The report of the Chief of Engineers of the United States Army for last year contained the following opinion concerning the work on the Mississippi: 'It may be stated that in a general way the improvement is providing a safe and adequate channel for navigation, and is now in condition to prevent the destructive effects of floods.' An engineer friend who is exceptionally well acquainted with the conditions writes in a recent letter: 'A thorough study of the whole Mississippi River problem is badly needed. Rip Van Winkle slept only twenty years.'

I believe that not less than ten or twenty years of hard work at accumulating and digesting facts and information will be necessary before any board of engineers, no matter how brilliant its personnel, can outline finally a sound and enduring policy. Some elements of such a policy can be determined and carried into effect in much shorter time, so there need not be ten or twenty years of inaction; but to embark to-day on a vast programme

of construction, without the necessary foundation of data, not only would cause the probable waste of hundreds of millions of dollars, but might commit us to a mistaken policy, and so make still more difficult, if not impossible, the proper final solution. It is entirely impossible to prepare an adequate plan for the coming session of Congress. The Mississippi River Commission and the army engineers would best serve the country by openly acknowledging that fact.

There should be a new and thorough study of the entire situation. Every possible solution should be exhaustingly explored and compared with every other, until it is thoroughly confirmed or thoroughly disproved. The panaceas we have denounced should be examined just as thoroughly and carefully as the methods we have favored. Only in that way can the engineer protect his work against his own unconscious prejudice. I formerly was thoroughly imbued with the army engineer's disbelief in reservoirs for flood control, but in the largest project I ever planned I investigated reservoirs, simply in pursuance of the policy of exhausting every possibility, and to my surprise I was driven to use them as the main feature of that project. Nothing is so fatal to good engineering as the habit of arriving at conclusions before every remote possibility has been thoroughly examined. Generally the final plan will not be any one device, but a carefully balanced combination of elements. This process of comprehensive, exhaustive investigation never has been followed through on the Mississippi.

One reason for our unpreparedness in plans for flood control is 'Washington science.'

Do you believe that the cutting of forests seriously affects floods? If you are a government employee, your

opinion will depend upon what department you serve. If you represent the Forest Service, you are sure forests do affect floods. The article by ex-Chief Forester Pinchot, just quoted, emphasizes that belief, and officials of the Forest Service are now expressing the same opinion. If you represent the Weather Bureau, you are equally certain that deforestation does not affect floods.

The army engineers are the silent, 'practical' men of the situation. The dogma of 'levees only' having been adopted by the Mississippi River Commission about half a century ago, it has been the duty of the engineers to drive ahead consistently, being careful not to disturb this authoritative policy by embarrassing investigations and research.

'When all is said and done, it is only the army engineers who really know the Mississippi.' In these words a prominent writer expresses a tradition which exists at our national capitol. If the opinion is sound, either it is because the training of the army engineer at West Point in hydraulic engineering and flood control is peculiarly effective, or else because the experience of the army engineer especially qualifies him in that field.

I believe there is no claim that a West Point education bestows unusual facility in hydraulics and flood control, and when we come to the facts of the situation we find that the army engineer's experience does not supply him with even a fair basis for judgment on this type of problem. To give army engineers versatility of experience, so as to fit them for military duty in time of war, they are continually shifted about. An engineer may have been sent to the Mississippi from an assignment of governing a military post. On arriving, he is expected to be an authority, not only on flood control,

but on the many other duties of his new position. After a short period (until recently only two years at a post was customary) he is transferred to another station, perhaps to harbor dredging on the Great Lakes. During his assignment on the Mississippi he does well to become acquainted with even the necessary routine administration.

Now, to become an authority on so complicated and technical a subject as flood control requires years of preparation and experience. What better can the army engineer do than accept the infallible dogma of 'levees only' handed him by the authoritative Mississippi River Commission, and hold to it like a good soldier without wavering? The Mississippi River Commission, which sometimes has been dominated by civilian members, determines general policies for the Mississippi. The engineers stationed along the river administer policies they have not originated. From the sheer force of public opinion, and against the tradition of the Mississippi River Commission, 'spillways also' is just now being added to this creed.

Many of these army engineers are men of fine native ability, and some have exercised vigorous independent initiative. Everyone at Memphis remembers Major Walker, now General Walker of the Canal Zone. During his brief assignment at Memphis he vigorously attacked the problem of construction equipment, endeavoring to displace by modern machinery the old levee-building methods. He worked hard and intelligently, but a new assignment called him before he had more than begun even this limited task. Other army engineers have shown similar intelligent interest, but good results are almost impossible under the system. I think I know by heart all the arguments in rebuttal — civilian

assistants, the permanent Mississippi River Commission, and the local levee boards; but I believe my criticisms hold. The lack of a scientific attitude on the part of the Commission has been too much to overcome.

IV

Many popular articles on the control of the Mississippi give expression to favorite panaceas. The general public, the sentimental conservationists, and the Bureau of Forestry, all give great weight to reforestation. The responsible civil engineers of the country generally dismiss it as having no practical relation to flood control.

Several years ago I made an effort to reach an independent judgment, but the following figures are from memory, as my notes are not available. A growing tree is a powerful pump. On a warm dry day in our Southern states a tree will lift out of wet soil and into the air perhaps half an inch of water from the forest area. English engineers in India have determined that a forest sometimes lowers the ground water level fifteen feet below similarly located, cultivated land adjoining.

When a forest pumps water out of the ground it leaves a soil reservoir for additional rains, but the water thus evaporated may travel only a short distance before it falls again as rain. In the North Central states the year's rainfall in general is evaporated at least twice and falls the third time before it flows away in the streams; that is, the rainfall is about thirty-five inches a year, but the run-off in the streams of the drainage area is less than twelve inches. In Iowa the rainfall is five times the run-off. In dry years forests may rob the streams of their ground water by pumping it into air too dry to allow it to fall again as rain, whereas in wet seasons water pumped from the soil

into the nearly saturated atmosphere may soon fall again, adding to the damage of excessive rainfall. These relations are so complex that no one has worked them out with assurance of accuracy.

In specific cases on small areas forestation may materially assist in practical flood control, but I believe that on the whole the effect is so slight that it is unsound to adopt general forestation as any part of a widespread flood-control programme for the Mississippi. I am a thorough believer in forestry for the direct value of the forests.

As to the value of reservoirs on the headwaters of the Mississippi, I very seriously doubt whether they have any proper place in a general flood-control plan for the lower river. The two largest reservoir systems in the basin are those on the headwaters of the main stream in northern Minnesota and on the Miami River in Ohio. The influence of the former system disappears in Minnesota, and the Miami River system is of little if any value on the Ohio River, only sixty miles away. It was built for local protection and is valuable for that purpose alone.

A billion dollars for reservoirs on the head streams would scarcely affect the lower Mississippi. It is possible that there are a few effective sites for reservoirs well down on the larger tributaries. Pittsburgh has developed a flood-control plan, providing for seventeen reservoirs above the city, which is being suggested as a possible help in controlling Mississippi floods. I believe that the construction of this system would fail entirely to benefit the Mississippi.

The types of reservoirs built for local protection on the headwaters, such as those on the Miami River in Ohio and the Arkansas at Pueblo, Colorado, of necessity are entirely useless for flood

control on the lower Mississippi. Except for rare cases, such as the proposed Boulder Dam on the Colorado River, where vast storage capacity is available in an unsettled country, storage for flood control and for power development are in striking conflict. Flood-control reservoirs need to be kept empty and ready for flood service, while power-development reservoirs need to be kept full to ensure steady power. It usually is a grave mistake to try to combine them.

The excessive rains which cause any single flood seldom extend over more than twenty per cent of the whole drainage area of the Mississippi. To be sure of controlling floods by reservoirs on the headwaters, even if they were feasible in other respects, the reservoirs should have at least five times the necessary capacity for any one flood, since the flood may come from any direction. For these and other reasons, flood control on the lower Mississippi by means of reservoirs on the headwaters in general is a delusion. Yet it is not safe to dogmatize even here. A careful study, such as never has been made, might possibly lead to the development of a few large reservoir projects on the larger tributaries that would play a minor but valuable and economical part in a flood-control programme.

But there is a type of reservoir which holds promise of definite value. Wherever main tributaries enter the lower Mississippi — namely, the St. Francis, White, Arkansas, and Red Rivers on the west, and the Yazoo River on the east — there is an area between the two rivers above their junction which is covered with backwater during floods. I have it on the authority of those who have made careful estimates that this storage has a material effect on stages in the lower river.

Moreover, these large areas are heavily wooded, and the steady evaporation

of perhaps half an inch of water a day from the leaves of trees might have a small but distinct effect on river stages below. These reservoirs are sure to catch the water from almost any source; they are already in existence, and will cost little to hold. Yet it is these very reservoirs that many people of the South, and the proponents of 'levees only,' are seeking to destroy, though the army engineers have stood for their retention. To many people 'the completion of the levee system' means carrying the Mississippi levees, and the levees on the main tributaries, down to their junctions, with backwater levees for the smaller streams between, and with pumping plants for areas having no gravity outlets. Thus these natural reservoirs, the only ones having any present value for general flood control, would be done away with.

As to spillways or outlets in addition to levees for the lower river, the Mississippi River Commission has long fought against them, but seems now about to surrender to the overwhelming opinion of the people on the lower river. I think we may assume that spillways will be a part of any future progress.

'Flood protection by levees has failed.' That, to-day, is the popular cry. But the system of protection by levees has not been a failure. Since the first settlement of the region, with inadequate funds available, the policy of 'levees only,' except for the omission of spillways and outlets, has been on the whole a reasonably sound, practical expedient, and to the army engineers is due much of the credit for sticking to that system. In only seven years out of thirty, I believe, have there been breaks anywhere in the main levee, and in one of the greatest areas, the Upper Yazoo Levee District, there has not been a single break in thirty years.

The tragic failure of the Mississippi River Commission was in considering 'levees only' to be, not simply a practical expedient, but a sacred dogma, and in letting the precious years pass without seeing the problem as a whole, and assembling and organizing the facts on which a permanent policy can be based.

V

What are some of the facts we shall need for developing a policy? I will suggest only a few.

How much water was stored in the natural reservoirs at the mouths of the main tributaries? How much was evaporated directly from overflow areas? Until this water is better accounted for than it has been, we do not know what channel capacity to provide.

How large floods should be provided against? Past estimates are entirely inadequate.

What are the hydraulic characteristics of the great river? At what velocities does the river begin to deposit mud, sand, gravel? At what velocities, and under exactly what conditions, does it begin to cut its banks? What forms, shapes, and sizes of channel would correct these deficiencies? Our opinions on these matters are largely the rule-of-thumb judgments of old river men, or are based on scattering and insufficient observations by the Mississippi River Commission.

To what extent would it be possible to train so great a river by submerged jetties or other constructions?

How much silt and sand are carried by the river? How far is it carried? How much comes from caving banks along the river, and how much is brought down from the tributaries?

Perhaps the best suggestion so far presented for securing such information

is a national hydraulics laboratory, proposed in a bill introduced in Congress by Senator Ransdell of Louisiana, at the suggestion of Mr. John R. Freeman, the eminent hydraulic engineer. Such a laboratory, with an appropriation of a million dollars a year for twenty years, including the cost of field investigations on the river itself, perhaps under the direction of the National Bureau of Standards or the Water Resources Branch of the United States Geological Survey, but preferably under an independent Flood Control Commission, would go far toward answering the fundamental technical questions involved. Such a laboratory would serve not only the Mississippi River but every community in the nation suffering from floods, and many other communities and interests that have hydraulic problems. Its management would not necessarily be in the same hands as the actual construction of flood-control works, and it could draw upon all the technical resources of the government without duplicating either personnel or equipment.

The levee-building machinery on the lower river during the past twenty years has been evolving from the primitive negro-mule-scraper outfit to the use of modern machinery. Coöperation with mechanical engineers and equipment manufacturers might further revolutionize present processes and save many millions of dollars. A study of methods and materials for bank revetment is essential.

There should be a disinterested economic survey. Is it wise to protect the whole flooded area at the present time? National funds have been spent freely in recent years without any such analysis. Take, for instance, the great flooded area between the Arkansas and Red Rivers on the west side of the Mississippi. This requires nearly

four hundred miles of high levee for its protection, almost the longest stretch on the river, yet of the land protected only about ten per cent is in cultivation. Much of it is primeval forest.

The South now wrestles with the problem of overproduction of cotton, and the labor supply grows steadily more inadequate as negroes go north. Like the rest of America, it needs less land in cultivation, rather than more. Under such conditions, why spend scores of millions of dollars of national money reclaiming millions of acres, like most of the tract just described, which are not now in cultivation, and for which there is no present need? Would it be feasible to depopulate a few of these great sparsely settled areas, just as millions of acres of uneconomic farm land are being abandoned in all parts of America? Even in populous Ohio over half a million acres have been given up in this way. The sentiment against leaving the old home has not weighed against the economic balance. Why not let some of this land grow much-needed hardwood timber, and move the thinly scattered population to other thinly populated districts? The result would be a wholesome reconstruction of economic life, with economy and great improvement in roads, ditches, schoolhouses, and social conditions.

If the greater portion of the flooded area between the Arkansas and Red Rivers should be left unprotected until it is really needed, and the land be allowed to overflow, the levees on the opposite side of the river would then be sufficient, and the storage of flood waters in the lowlands would reduce the river stages farther south. A large part of the total cost of flood control might be saved for fifty years. Why spend several dollars of government money to protect one dollar's

worth of cultivated land? The speculative owners of waste land will object, and that brings us to the next issue.

Who will benefit by this work of the government if it is done without cost to the local interests? As a matter of fact, a considerable part of the overflowed land is owned in large tracts by corporations. Vast areas were bought from the states at from twenty-five cents to a dollar and a quarter an acre. (The national government gave millions of acres of this land to the states, the income from its sale to be used for flood control.) These owners have paid much more than the purchase price in taxes, but most of them have made good profits from the timber, even if they should now give back the land itself. Any value added to the land by national expenditure will be added by these speculative owners to their selling prices, and the national government will be contributing scores of millions of dollars to their treasuries. Why should the government do this?

Would it not be wise, if the government is to pay a part of the cost of flood control, to limit that help to holdings of two square miles or less, and only in case a material part of such area is occupied in good faith and is being put into cultivation; exceeding that area only for plantations that now are actually cultivated under centralized ownership and administration? In case of larger holdings, would it not be well to charge the whole cost to the owner?

If such owners cannot pay, let them return the land to the national government, to be held as national hardwood forests, or for settlement by small home owners. This limitation of ownership would be in accord with the federal reclamation policy, though in that case much smaller holdings were allowed. The national government might

then pay the whole cost of reclaiming its own holdings. Such a programme would require state legislation, but such legislation could be made a condition of receiving federal assistance.

Two square miles may seem a large homestead to exempt from paying the whole cost, but in some parts of the South farming is in larger units than in the North. The more energetic and progressive planters often own and manage large tracts, renting to negro tenants in patches of ten or twenty acres. I doubt the wisdom of suddenly disturbing that agricultural economy.

There will be an intensive effort during this session of Congress to keep the attention of the nation centred on the poor man and his family floating downriver on his housetop. There will be a concerted effort in some quarters to avoid all thoroughgoing analysis, and to get the government committed to a programme of vast expenditures while public sympathy is at white heat.

VI

There is an even greater issue involved than the prevention of Mississippi floods — the preservation of our tradition of national economic stability. No constitutional barriers protect our government from fatal deterioration through unsound economic policy. Only the temper of the people can do that. The evil precedents which destroy nations are made in times of great stress, when emotion overrules judgment.

If almost any American community or interest, either North or South, can get money from the national treasury without cost, it will do so without compunction. To the imagination of the average citizen, the national treasury, with its hundreds of millions of surplus, is an inexhaustible source of wealth. Speaking from a quarter of a

century of experience in flood control, part of the time in the federal service, where I came into first-hand contact with the American attitude toward the national treasury, I believe I have never known a community, North or South, which would not take federal funds if it could get them, and which would not spend them more wastefully than if the local community were required to pay the bill.

If the lower Mississippi were unique in its needs and deserts, it might well be made an exception to a national policy of local self-help. But it is not unique. I have just come from a great region in northern Minnesota where three quarters of the settlers have abandoned their homes and moved away, unable to meet the taxes imposed by reclamation, and unable to bear the burden of pioneering in adverse years. On the middle Rio Grande in New Mexico two thirds of the land has gone out of cultivation through excess of water. These people would like government help. In 1913 the Miami Valley of Ohio lost a hundred million dollars in twenty-four hours, and four times as many lives as were lost in the recent Mississippi floods. The people have spent thirty-five millions for protection and would like to be relieved of the resulting burden of taxation. The suddenness of this disaster precluded the gradual development of dramatic interest.

The planter along the lower Mississippi takes risks of a flood from the river, and once in six or seven years he loses. The dry farmer of the West takes risks of too little water, and loses half the time. A hundred American cities are awaiting their turn to experience catastrophes comparable to those of Dayton, Hamilton, Columbus, Pueblo, and Erie, and each would like to have the nation shoulder its burdens. A hundred river valleys will have floods

on a smaller scale, as serious in proportion as that on the Mississippi.

Congress may be about to establish a national policy which will rise up to face us as a precedent on every recurrence of a catastrophe. What shall it be?

May I outline four possible courses? First is that of paying the whole cost from government funds. This is demanded by the South. In the words of Governor Martineau of Arkansas, 'Mississippi floods can and should be controlled. This is a national responsibility, the expense of which should be borne entirely by the federal government.'

Such a policy, I believe, in time would menace our national economic stability. Local interests would submerge any sense of national responsibility. With such a policy established, Congress would deteriorate, because that candidate would be elected who could 'bring home the bacon,' and his ability in that respect would depend on his capacity for logrolling.

Southern leaders present flood relief as a national obligation, but the facts are against them. If anyone has violated nature's laws in this case, it is those who have made their homes on lands which have been flooded from time immemorial.

If there is any merit in these claims, it is so small and so completely undetermined as not to serve as the basis of an obligation. The states draining into the Mississippi are under scarcely more moral obligation to prevent floods on the lower river than is California under obligation to the drouth-stricken Nevada farmers because California mountains cut off the rain-bearing winds from the Pacific. The cause of both troubles lies in the configuration of the continent.

If Congress should adopt the policy of paying the whole cost of Mississippi

flood control, it will be but opening a Pandora's box of troubles, for every other flood-stricken section will want similar treatment. In every part of America, Congressmen and their constituents are calculating the consideration they will receive in return for their votes in favor of controlling Mississippi floods at national expense.

A second method would be for Congress to make long-time loans at a low rate of interest. This policy, I believe, would be as pernicious as the first, for the region affected would be plunged into a campaign of nullification.

I speak not from distrust of any specific section, but from observations of Americans in relation to national funds. Under the National Reclamation Act the national government loaned funds to settlers on irrigation projects, to be returned through a long term of years. (Whereas along the lower Mississippi the national government gave its lands outright to the states, the proceeds of their sale to be used by the states for reclamation and flood control, in the West the national government sold the lands itself and administered the funds for reclamation under the National Reclamation Act, and later added to this fund by direct appropriation, to be reimbursed in installments.) The nullification of these reclamation debts has been a live issue in the West. With a compact body of voters like those on the lower Mississippi, nullification would be a dominant and corroding political issue for a generation to come.

As a third possible course, the localities needing relief might be required to pay the whole cost. That has been the traditional American policy, except for a few cases such as the special favors granted to the states along the lower Mississippi in their flood-protection work in the past. A sound argument can be made for this policy.

As against these methods I propose a programme of far-reaching consequence. It has elements of evil as well as of good, but I believe it represents a possible sound public policy, which can be applied at all times and in all sections of the country, without the necessity for false claims or misrepresentative propaganda, and without the necessity for political logrolling.

I propose that the government adopt a national policy concerning flood control and allied work, whereby the national government will pay a certain specified part, — for instance, a half of the cost, — provided that the localities particularly affected pay the other half; and that this policy apply to all such undertakings throughout the country, and not alone to the lower Mississippi. An almost identical policy now is followed for national assistance in highway construction. Such help should not be available to large tracts of land held for speculative purposes.

Such a national policy would reduce waste. A community will not be excessively wasteful if it has to pay for even half the cost. I can point to government expenditures on our Southern rivers where the work would not have been done if even ten per cent of the cost had been charged back to the locality actually interested in the so-called improvement.

This policy would help all similar cases, even though the area covered were not large enough to capture the nation's sympathy or to bring pressure on Congress. It would take the keen edge off disaster and catastrophe, or prevent their occurrence. It would emphasize the fact that we are one people and mutually interdependent, and would build up a realization of common interests, which is one of the strongest bonds of national unity. The South could then get help in an honorable manner, without recourse to the

present subterfuge of 'helping navigation,' one of those political hypocrisies that become sacrosanct by long acquiescence, or making false claims as to the origin of its troubles. Any policy which encourages political straightforwardness is good for the national health.

In the course of time such federal expenditures would be distributed fairly evenly over the country, and no part would be fighting to hold a vested right to insolvency, to be supported by the rest. National supervision of planning and construction would tend to improve standards of design. A nucleus of professional engineers, giving their lives to that particular field, might reach standards of excellence which few private organizations could achieve — provided that 'Washington science' and political appointments can be eliminated, as they are very largely eliminated in the Bureau of Standards and in the United States Geological Survey.

What if the farmers and planters of the lower Mississippi cannot pay even half the cost of reclamation? Their land is repeatedly spoken of as the most fertile in the world. During the past thirty years very few areas have lost more than four crops from Mississippi overflow. One of the largest of these areas has not had an overflow in thirty years. If such land cannot pay half the cost of its protection, should we not inquire carefully into the cause? Perhaps for some reason it is not worth reclaiming, or perhaps there is something vitally wrong with its agricultural and financial economy.

VII

I will close with a résumé of a suggested practical national programme with reference to the Mississippi and to flood control in general.

First, let the national government at its own expense repair the crevasses in the levees, so that next year's crops may be safe. This may be done by the nation as an emergency service to a community that has suffered a calamity. It will cost millions, and for a year or more will require most of the available equipment and trained men.

Second, provide the necessary organization and facilities and begin collecting the facts on which an enduring policy may be based.

Third, find out, as soon as possible, what further work can wisely be done in the immediate future.

Fourth, make an economic survey to determine whether it is wise to protect the entire flooded area at the present time, and what should, from an economic standpoint, be the sequence of protective work.

Fifth, prepare a comprehensive flood-control code, to be passed in substance by the states affected, as a condition to receiving federal aid. Such a code

should provide for the return of large tracts to the government if the owners will not pay the whole cost of reclamation, and would provide for the operation of the programme and for interstate coöperation. Where two or more states are bound together by common problems, to have interstate flood-control districts organized in the federal courts rather than in state courts, as at present, would solve many a knotty question.

Sixth, establish a uniform flood-control policy providing for a specified proportion of government assistance on all such projects.

Seventh, create a national flood-control commission, independent of present government engineering organizations, to which would be assigned the administration of this policy.

Eighth, proceed with nationally assisted flood-control work thereafter only in accordance with the terms of that policy, and under the general supervision of that commission.

SIAM'S FIGHT FOR SOVEREIGNTY

BY FRANCIS BOWES SAYRE

I

SINCE Marco Polo first told of the far lands of Cathay, one trading nation after another has sought through peaceful means or through force of arms to capture the coveted trade of the Orient. The efforts of British merchants to force their way into China culminated in the Opium War and the Treaty of Nanking in 1842, which opened up the more important

Chinese coast cities to foreign trade; additional treaties speedily followed, imposing on China the system of extraterritoriality for the protection of Western merchants. In 1853 Admiral Perry's dramatic appearance in Japanese waters marked the beginning of Western trade in Japan; and soon thereafter Western treaties were made with the Shogun imposing a similar

system of extraterritoriality upon the newly awakened Japanese nation.

Even Siam, hidden away between India and China, was not overlooked. In 1855 Great Britain, in order to foster its growing trade with Siam, persuaded the Siamese King to sign a new treaty which was destined to have profound and far-reaching effects upon the development of his country. The treaty required that 'all British subjects coming to Siam shall receive from the Siamese Government full protection and assistance to enable them to reside in Siam in all security and trade with every facility,' and provided that all British subjects in Siam should be exempt from the jurisdiction of Siamese courts and that Siam should never raise its import tariff on English goods beyond three per cent. Neither of these provisions was felt to be burdensome at the time; consular jurisdiction seemed a measure wisely framed to meet the exigencies of a day when Siamese courts knew nothing of Western justice or Western ways, and a three-per-cent import tariff was then amply sufficient to provide for the simple needs of the undeveloped state. But unhappily the negotiators of this one-sided agreement had neglected to insert any time limit for the duration of the treaty; nor was any method provided for abrogating or modifying its provisions except with the consent of both parties.

What Siam had granted to Great Britain she could not well refuse to other powerful states. Between 1856 and 1870 similar treaties were made with the United States, France, Denmark, Portugal, the Netherlands, Germany, Sweden and Norway, Belgium, Italy, Austria-Hungary, and Spain. All of these were closely modeled on the British treaty; all were without time limit. The restrictions were irrevocable and eternal.

During the last third of the nineteenth century Siam underwent a remarkable transformation. Under the intelligent and able leadership of King Chulalongkorn, railroads were built, telegraphic and mail communication with the outside world established, irrigation projects undertaken, slavery and gambling abolished, Western education introduced, the entire government reorganized and modern ministries of state created, an adequate system of law courts established, and a royal commission appointed to prepare codes of law based upon the best Western models. By the opening of the twentieth century Siam had become a modern state aquiver with Western progress. Internationally she was prepared to take her place in the Family of Western Nations.

With her profound transformation the conditions under which the early treaties had been made were for the most part swept away; but the treaty restrictions remained unchangeable. Not only remained — through a series of harsh interpretations their provisions were rendered still more onerous. The clauses providing that foreigners should be tried by their own consuls, originally designed for the mutual convenience of both foreigners and Siamese, were interpreted so as to give foreigners exemption not only from Siamese courts but also from any Siamese legislation which was unacceptable to foreign wishes. Even so, had the exemptions been confined, as they were originally intended, to Europeans, the situation would have been more tolerable. Unfortunately the Western nations insisted on including within the exemptions many thousands of Asiatics, inhabitants of European colonies in Asia, and therefore in point of law European subjects. The inclusion of these native races, not bred in a European civilization,

was without inherent reason or sound justification, and its tendency was to arouse in many Asiatics resident in Siam a feeling that Siamese law could be disregarded with impunity. Thus Mohammedans from Malaya, Tamils from India, native races from the island of Java, Chinese from the Portuguese Colony of Macao, Burmese, Cambodians, Annamites, all gained exemption from Siamese courts and to a certain extent from Siamese law, even though dwelling permanently in Siam. So convenient and profitable did this exemption become that Chinese and even in some cases Siamese began to apply for and obtain enrollment in the foreign legations as 'protégés' of the treaty nations.

Thus excluded from administering law and punishment to an ever widening circle of foreign subjects and protégés, Siam began to find that no important law directly affecting European subjects or protégés could be put into force without first gaining the consent of the foreign offices in Europe. When Siam passed a General Education Law providing for universal compulsory education, a certain European nation refused to accept it because it offended the susceptibilities of its Mohammedan subjects in that it compelled girls to go to school during the sacred month of Ramadan, and as a result, with respect to all such children, the law could not be enforced. Similarly the law for the protection of trade-marks has remained since its promulgation a dead letter because infringements were found to be chiefly by foreigners, and Siam could not induce all the Treaty Powers to accept it. The subjects of one of them were profiting too greatly from its infringement. Even laws so obviously desirable as proper police regulations for the correction of abuses in Bangkok often could not be enacted or could

be enacted only after the most discouraging delays because of the extreme difficulty of winning the unconditional approval of a dozen different foreign legations.

The treaty exemptions, furthermore, furnished a ready refuge for wrongdoers. If Wu Sung had arranged for a particularly valuable consignment of opium to be smuggled in across the northern frontier, or if Abdul Razim desired to run a gambling shop without risk of police interference, each would arm himself with foreign papers as a prudent man should.

The financial provisions of the early treaties were equally intolerable. The pushing of widespread education demands the expensive training and paying of thousands of teachers. The development and stimulation of the agricultural resources of an undeveloped country demand large and increasing expenditures. An efficient administration of justice demands highly trained and adequately paid judges. Policing becomes more expensive as the amount of police regulation increases. Progress costs money. It began to be evident that Siam's continued progress could be just as effectively menaced by the inability of the state to finance further works of improvement because of the fiscal restrictions of the early treaties as by its inability to assume jurisdiction over foreigners. If Siam's progress was to continue, it became clear that the old treaties must go.

Yet there seemed to be no possible way. Suggestions, requests, entreaties, brought no results. Since the treaties, written in the interests of the traders, contained no time limit and no termination clause, Siam was helpless. Japan had finally succeeded in freeing herself from very similar treaty restrictions by proving the possibilities of her military power in the Chino-Japanese War. Siam did not possess the military

resources to make such a solution possible, even were it desirable.

II

In 1907 Siam had succeeded in obtaining from France a treaty providing that French Asiatic subjects and protégés should become subject to the jurisdiction of Siamese courts. But for this concession a heavy price was paid. Siam had to agree that henceforth French Asiatic subjects and protégés throughout the whole of Siam should be entitled to all the rights and privileges enjoyed by Siamese subjects. Furthermore, French consuls were given the right to evoke from Siamese courts and to try themselves all cases in which the defendant was a French subject or protégé registered at a French consulate prior to 1907; and, should an appeal be taken by such a subject from the judgment of a Siamese court, the treaty required that the appeal judgment must bear the signature of two European judges. Finally, the treaty was sealed by the 'rectification' of the frontier between Siam and French Indo-China, Siam ceding to France the territories of Battambang, Siem-Reap, and Sisophon. As to all non-Asiatic French subjects, extraterritoriality remained; likewise the fiscal clauses of the French treaty of 1856 were continued in full force.

In 1909 a somewhat similar treaty was signed with Great Britain, applicable, however, to British European as well as Asiatic subjects. Under this treaty Great Britain agreed to abandon henceforth the right of extraterritoriality for all British subjects. But for this concession an even heavier price was exacted. All British subjects throughout Siam were to be entitled to the same rights and privileges as Siamese subjects, and British consuls were to have the right to evoke from

Siamese courts and to try themselves cases in which the defendant was a British subject registered prior to the date of the treaty and which did not fall within the scope of regularly promulgated Siamese laws. In addition the treaty required that European legal advisers must sit as judges in all cases where British subjects were defendants, and where the defendants were British non-Asiatic subjects the opinions of the European legal advisers were to be deciding; and again the treaty was sealed by Siam's cession to Great Britain of the states of Kelantan, Tringganu, Kedah, and Perlis. The requirements concerning European legal advisers were without time limit; and all the fiscal provisions of the Treaty of 1855 remained in force. Siam thus gave to Great Britain all she had to give, and in return received only a measure of judicial autonomy; fiscal autonomy seemed further away than ever.

Eight years passed; further progress in the line of treaty revision seemed impossible. In 1917 Siam threw in her lot with the Allies and declared war against Germany; she sent an expeditionary force to France composed largely of aeroplanists. When the war was won Siam appealed to her allies gathered around the council table at Versailles.

'We have all been fighting,' she said, 'shoulder to shoulder for the rights of small nations and for the great cause of humanity. If, as so often proclaimed, we have in truth been fighting to protect the weak against the rapacious strong and to remove some of the old injustices that make for war, is it not right and fair that Siam should be freed from the outworn treaty restrictions of an earlier day which under the changed conditions in Siam have lost all reason for existence?'

The diplomats shifted in their chairs; a few fair words were spoken; but of all those present only one took definite action. President Wilson replied: 'You are right. America will give to Siam a new treaty relinquishing the old extraterritorial rights; and she will give it as an act of justice, freely and without price.' It was the new note in international diplomacy; justice and international right meant more than empty words.

In 1920 President Wilson gave to Siam the treaty which he had promised. Without compensation and without secret understanding of any sort, America, recognizing the efficient administration of justice which Siam had achieved, surrendered all rights of extraterritoriality, provided only that the American consul should have the right, up to five years after the promulgation of the last of the Siamese codes of law, to evoke out of the Siamese courts any case involving American citizens should this seem necessary in the interests of justice. Although as a matter of fact the right of evocation under the American treaty has never been exercised, this wise provision furnished to American citizens a guaranty against possible judicial abuse and one which Siam could gladly give because of her confidence in her own courts. Furthermore, the new treaty abrogated the earlier American treaty of 1856 in its entirety; and America, recognizing Siam's right to fiscal autonomy, agreed that Siam should have the right to impose any tariff she pleased against American goods, provided that all the other Treaty Powers would agree to similar provisions without compensation or price. The new treaty was made terminable after a ten-year period upon one year's notice given by either party, and it was expressly provided that such termination would

not revive the former treaty. Through America led the path to freedom.

III

After the American treaty had been signed, Siam again approached Great Britain and France and requested each to follow America's lead. Great Britain replied that until the other Powers had gone as far as she had in the treaty of 1909 any application for further treaty revision 'would appear to be premature.' France made favorable replies, but little seemed to come of them. Three years passed with the goal apparently no nearer. A new treaty with France involved Siam's relations with her Eastern neighbor, French Indo-China; and the difficulties of the problem were increased by the political situation in Hanoi and by France's anxiety not to give offense to Indo-Chinese susceptibilities. Ultimately it was agreed that problems concerning Indo-China alone should be excluded from the main French treaty and should form the subject of a separate French convention negotiated directly between Bangkok and Hanoi. The Quai d'Orsay then placed the negotiations for the new French treaty in the hands of the French Minister to Bangkok, a forward-looking man thoroughly conversant with Indo-Chinese opinion. After his arrival in Bangkok early in 1924 negotiations were pushed in earnest.

In the meantime the system of extraterritoriality in practice seemed more and more unjustified and vexatious. As a result of the war, Germany and Austria had indeed lost their treaty rights; but ten European Powers, deaf to every plea, still insisted on their legal rights, and unless Siam could persuade each in turn without price or compensatory benefit to surrender them, no feasible way of escape

lay open. It seemed clear that it would be impossible to accomplish such a task through ordinary methods; the only practicable road to success, if success were possible at all, lay through direct personal work in the various foreign offices in Europe. Because of the unavoidable ignorance of responsible officials in European foreign offices as to actual conditions in Siam, and the natural disinclination of European representatives living in Bangkok to surrender existing privileges, long-distance negotiations at Bangkok would block success at the very outset.

These ideas had the active support of the able and energetic Siamese Minister for Foreign Affairs, Prince Traidos Prabandh, a man of wide diplomatic experience in both Europe and America. King Rama VI graciously entrusted the fortunes of this project, so vital to Siam, to the keeping of the Adviser in Foreign Affairs, who, armed with a roving commission, was to sail from Bangkok in the autumn of 1924 and, in conjunction with Siam's diplomatic agents in each country, to spend the ensuing year seeking to convince one after another of the foreign offices of Europe of the wisdom of giving up their existing rights in Siam.

It was our great hope that the French negotiations could be brought to a successful termination and the treaty signed before our departure, but as each difficulty was overcome new obstacles arose, and every new obstacle caused fresh delays. Nevertheless, by the end of the summer, agreement had apparently been reached on the treaty draft. France was to renounce all the provisions of former treaties except those which concerned Indo-China, and to grant to Siam judicial autonomy subject to a limited right of evocation and fiscal autonomy on the

same lines as in the American treaty. Most important of all, the new treaty was to be terminable after ten years by either party. When the time came for our departure from Bangkok we supposed that everything was settled.

IV

Upon reaching Paris early in December 1924, however, to our dismay we found the treaty apparently as far from settlement as ever. At our first meeting with the French Minister to Bangkok we discovered that new questions had arisen; the discussion of certain underlying principles revealed sharply diverging interpretations maintained by the French and the Siamese Governments; and to the French interpretation the Siamese Government found itself quite unable to accede. Negotiations must be taken up afresh. Several weeks of anxious, intensive work followed. By the middle of January the French Foreign Office finally agreed to accept a formula satisfactory to Siam, and also gave its consent to the insertion of an unusual and sweeping arbitration clause by which both parties agreed that, in default of settlement by diplomatic or arbitral means, all questions arising between them should be settled by the Permanent Court of International Justice in conformity to the principles of the League of Nations. Even questions affecting national honor and vital interests were not excepted. After complete agreement on the treaty draft had been reached among ourselves, the text was laid before the French Cabinet and its consent won. Finally a date — January 31 — was actually set for the signing. Success seemed at hand.

During the ten days' interval while the treaty text was being printed preparatory to the signing, we proceeded

to The Hague to open negotiations for a new Dutch treaty. Three days before the date set for the signing of the French treaty, out of a clear sky came a telegram from Paris saying that the French Foreign Office had just received cabled word from their *Chargé d'Affaires* at Bangkok that an outrageous and murderous attack had been made upon the wife of one of the French legal advisers in Siam and the treaty therefore could not be signed. The news burst like a bombshell.

We rushed back to Paris heavy of heart and cabled to Bangkok for a full report. For several critical days the outcome hung in the balance. What we most feared was a hostile newspaper campaign in the French opposition press, which might easily have killed the treaty. Bangkok's cabled reply, however, gave some room for hope. The attack had been made without malice by an irresponsible individual too drunk to know what he was doing. Exactly similar attacks might have happened on the streets of Paris or New York.

But the difficult task remained of convincing the French Foreign Office of the truth of these facts in the face of an adverse report from the French *Chargé* at Bangkok, and of doing so without undergoing the long delays incident to an ordinary judicial trial. Until the French treaty was signed there was little hope of securing other treaties. It was not enough that the French Foreign Office had agreed to ask for no indemnities. For the sake of the other treaties France must be persuaded to sign the new treaty forthwith in the very face of this unhappy incident, and to sign it without additional demands or modifications. Fortunately the affair had so far been kept out of the French press; but the downfall of the Herriot Ministry was already threatening, and the

Foreign Office feared that if the treaty was signed in complete disregard of such an incident the opposition press might still publish the story in an exaggerated form and cause the overthrow of the Government. Followed anxious days, discussions, lengthy cable dispatches, persuasions, proposals and counterproposals. For a week the outcome lay in the lap of the gods. In the end Siam's efforts prevailed. France agreed to sign the treaty forthwith, and on February 14, at one o'clock, Premier Herriot as Minister for Foreign Affairs, and Prince Charoon, the Siamese Minister, attached their signatures to the document that meant so much for the future of Siam. Victory, after months of uncertainty and struggle, had come at last!

V

The delay in getting the French treaty signed prevented the opening of British negotiations until late in February. The outlook in London was discouraging. The British Minister to Bangkok, who had been in London in conference with the British Foreign Office, had just departed for Siam. The British Labor Government, which had on several occasions shown a friendly interest in Siam, had been overthrown and succeeded by a Conservative Government. Furthermore, when, several months before, the Siamese Minister of Foreign Affairs had approached the British Government suggesting a treaty revision, Great Britain had given a noncommittal reply, but requested that if conversations should be opened they should be carried on in Bangkok, a request which the Siamese Minister felt unable to refuse. Altogether the situation seemed far from hopeful.

Mr. Austen Chamberlain, in our opening interview at the Foreign

Office, presented the British point of view with great frankness and fairness. The United States, he said, could afford to surrender existing treaty privileges in Siam, because American trade there was, comparatively speaking, non-existent. With Great Britain the situation was very different. Over eighty per cent of the entire Siamese export trade was to British territory, and some sixty-seven per cent of Siam's imports were from British territory. If Siam should be released from the three-per-cent tariff restriction and should suddenly impose a heavy import tariff, great hardship would result to the British merchants concerned. For this reason, while Great Britain might be willing to agree to a moderate increase in the existing three-per-cent restriction, she could not feel justified in granting to Siam complete tariff autonomy. Furthermore, British trade in Siam had assumed such substantial proportions that Great Britain could not afford to take the risk of jeopardizing her commercial interests in Siamese law courts without adequate protection; the presence of European legal advisers constituted the surest guaranty of such protection. For these reasons, Mr. Chamberlain confessed, it would seem premature at this time to surrender the existing treaty privileges.

These arguments seemed, in the light of immediate interests, difficult to answer; nevertheless one could not but feel that in the long view Great Britain would be making a mistake in taking such a position. To the reasons for this Mr. Chamberlain listened with an uncommonly open mind; and he attentively considered our suggestions for securing practical and adequate protection for British interests in Siam by methods so framed as to avoid infringing Siamese

sovereignty or wounding the national pride of the Siamese.

At the end of an hour's talk Mr. Chamberlain had convinced us of his sincerity and his fair-mindedness. 'We had made up our minds to refuse the things you ask,' he said. 'But you have put a new light upon the situation. What you propose seems to me reasonable and fair. If you can convince the experts and heads of departments of the Foreign Office, of the Board of Trade and the Department of Overseas Trade, of the Colonial Office and of the Indian Office — if you can convince them as you have me, while I can't make any definite promises, I don't see why we shouldn't be able to enter upon negotiations along the line you propose.' Siam had won her fighting chance!

A day was appointed in the following week for Siam to argue her case before the assembled representatives of the several ministries concerned. In the meantime our concrete written proposals were submitted to the various government departments, and were further explained and urged in intimate personal conferences with those who were particularly influential.

On the appointed day we met with the assemblage of British representatives around a long table in the British Foreign Office. Everything depended on the outcome. It was clear that, if Great Britain refused to give Siam a new treaty, Italy would likewise refuse. Also Portugal and Spain, and probably Denmark, Norway, and Sweden. We discussed the British position in Siam from almost every angle; the British experts showed by their searching questions how carefully they had studied our proposals and suggestions, and for a whole afternoon, amid the rapid fire of question and answer, the tide of battle hung uncertain. All forms of diplomacy had been dropped; with

utter frankness we sought to reach the fundamental truth. We endeavored to explain the weak as well as the strong points of our proposals; and the British representatives were equally frank and aboveboard. At the end of the day we saw eye to eye, and the British Foreign Office said, 'We'll give you a treaty along the lines which you propose.'

Followed a month's intensive work of hammering out a draft which would relieve Siam from the old, unjust restrictions and yet which would not leave British interests unprotected. It was agreed to wipe away all the former treaties, and to replace them by a new General Treaty and a comprehensive Commercial Treaty framed in the new spirit along the lines of our initial proposals. We held numerous meetings with assembled representatives of various British offices and found our minds clashing over many technical details and questions of minor importance. For instance, in connection with the treaty provision which required the payment of drawbacks on the reexport of goods not consumed in Siam, the Indian Office desired a provision releasing Siam from having to pay drawbacks on filled gunny bags but forbidding the imposition of an import duty on them in excess of one per cent. To this Siam could not agree; for her main export is rice, which is handled in gunny bags, and should the price of foreign gunny bags be greatly advanced, Siam might one day have to manufacture her own, and temporarily impose a moderate duty exceeding one per cent. It was therefore necessary to find a formula which would satisfy the Indian Office and yet which would not saddle Siam with an injurious restriction. Similarly, provisions respecting the general granting of forestry concessions and oil rights must be dealt with in a way such

as would not hamper Siam's future development of these industries. Intricate legal problems arose over the rights of children born in Siam whose parents were natives of Burma or of British protectorates; questions arose as to the probate of estates of British subjects dying in Siam. The position of India and the self-governing British Dominions with regard to treaty rights and privileges in Siam opened up fresh complications and problems. These and a hundred other questions furnished many contentious points; yet never once during the course of the negotiations was there resort to subterfuge or concealment. We sought a common object, and in mutual wholehearted confidence hurdled all obstacles which lay in the path.

By the end of March we had provisionally agreed upon drafts which embodied even more than we had originally planned to ask. Without compensation Great Britain agreed to surrender all her existing treaty privileges in Siam and to recognize in precisely the same terms as in the American treaty Siam's complete right to judicial and fiscal autonomy. The old treaties had been irrevocable and eternal; the new General and Commercial Treaties were each made terminable after ten years by either party. Siam in return agreed not to impose any customs duty in excess of five per cent *ad valorem* upon textiles, upon iron, steel, or manufactures thereof, or upon machinery manufactured in British territory and imported into Siam; but this undertaking was limited to ten years after the coming into force of the treaty, after which Siam's hands were free. In short, Great Britain agreed that henceforth British influence in Siam should be built upon Siamese goodwill rather than upon irritating and irrevocable treaty restrictions. It was a farseeing step for Britain to

take. The provisional treaty drafts were mailed to Bangkok to receive the detailed consideration of the Siamese Government and the comments of the British Minister to Bangkok; the five or six weeks which must elapse before cabled replies could come would afford an opportunity to push negotiations in other countries.

During the course of the British conversations, negotiations with the Netherlands Government were pushed with all possible speed; the night boat across the Channel made it possible often to spend alternate days in London and The Hague. The Netherlands were generous in their response to Siam's appeal; friendly understanding and mutual confidence smoothed away all difficulties. The questions raised by the Netherlands treaty were far less complicated and fewer than those raised by the British; consequently, as the British draft took shape the draft of a new Dutch agreement progressed even more rapidly. Therefore by the time the British drafts were completed a new Netherlands treaty text had also been agreed upon, closely following the American model. The day following the dispatch of the British text the Netherlands draft was mailed to Bangkok. In the opening days of April we took the train south to begin negotiations with Italy.

VI

At Rome Siam's case was urged, first before individual, influential officials of the Italian Foreign Office, and later before a formal group appointed to consider the matter. Italian interests in Siam are comparatively small; and Italy saw little reason for changing the existing situation. The progress of the negotiations seemed so slow and uncertain that a conference with Premier Mussolini was arranged. At

the last moment Signor Mussolini was prevented by illness from keeping the engagement. Time pressed; and, leaving Rome, we returned to Paris and took the Sud Express for Lisbon.

A new Portuguese treaty was of particular importance to Siam; for, apart from gaining the right of fiscal autonomy, Siam is embarrassed by large numbers of Chinese residents who claim exemption as Portuguese protégés by virtue of alleged birth in the Portuguese colony of Macao near Hongkong. Proof of the falsity of each individual claim by patient investigation and the securing of contrary evidence fails to deter others from indulging in the same practice; apparently this is only one of the inevitable and incurable outgrowths of the system of extraterritoriality.

The political situation in Lisbon is peculiar. Ministry succeeds ministry with startling rapidity; the regularity of the process is broken only by revolution. A minister's hearty support may prove valueless with his removal a few weeks later. The frequent changing of cabinet positions concentrates power in the hands of the permanent officials. Yet these cannot be reached except through their minister. Accordingly we first held conferences with the Minister of Foreign Affairs. After his support had been gained, no one could have been more courteous to us than he; yet, as we well knew, the real battle still lay before us.

Of one man we had been warned on several sides; if the path of our treaty led through his office, we were told, our quest would prove well-nigh impossible, for he was infinitely difficult to win and, once having made up his mind, adhered unwaveringly to his decision. Our hopes fell when we discovered that he headed one of the important divisions of the Foreign

Office without whose sanction no treaty could pass. After holding conferences with several of the other heads of divisions with varying measures of success, we secured an appointment to confer with him on the last day of April.

It was with rather gloomy forebodings that we walked down the long, highly ornamented corridors to the former bedchamber of the King, which with the coming of the Republic had been converted into an office. But to our delight we found that here was a man of brains and character who had really studied and digested our proposed treaty draft, and was prepared to act. We entered into detailed discussions with him, and that very afternoon agreed to various modifications in the draft; and when we parted we realized that of all in Lisbon he best understood the point of view of Siam. He proved our staunchest friend; when seemingly insurmountable obstacles arose in other divisions of the Foreign Office, he championed our cause and overcame the opposition. Had it not been for him, Siam in all probability would not have won the treaty.

In the end the provisional consent of the various officials to a treaty closely following the American model, and also embodying a general arbitration clause, was won. The draft could not be finally approved, however, until it had gone before various bureaus and legislative committees. Our friends in the Foreign Office promised to expedite matters as much as possible and to defend the draft if necessary; in the meantime negotiations could be opened in Spain.

VII

In Madrid good fortune favored us. It chanced that on the day of our arrival the King was to attend the

races; the American Ambassador invited us to accompany him to the gala luncheon at the race course, where we were introduced to General Primo de Rivera, then President of the Military Directorate and in supreme power, and to others close to His Majesty. That very afternoon, thanks to the American Ambassador, His Majesty heard about our Siamese treaty.

Next day there followed a conference with the all-powerful General Primo de Rivera; and, once his whole-hearted consent had been won, success was assured. He promised us the treaty and appointed a commission to carry on the negotiations, placing at its head his nephew, Señor Fernando Espinosa de los Monteros, the acting head of the Spanish Foreign Office. Every evening we gathered around a table at the Foreign Office in a large red room resplendent with fine old paintings; we modified only in quite unimportant details the original treaty draft as presented to General Primo de Rivera. In little more than a week the work was done and Spain had agreed to the surrender of the old treaty and the acceptance of a new one closely following the lines of the American treaty. The commission good-naturedly laughed at our informality and our continual plea for speed. 'You Americans would like to make a treaty over the telephone,' they exclaimed. But they never failed in their kindness or in their generous and sympathetic understanding of Siam's difficult position.

From Madrid we returned to Paris, and thence on to The Hague for the final ceremonies attendant upon the signing of the treaty with the Netherlands. On June 8 the Dutch treaty was signed by Dr. van Karnebeek, the Netherlands Minister of Foreign Affairs, and Prince Damras, the Siamese Minister to The Hague. On the

same day disturbing news arrived from London. The British Foreign Office wrote that the British Minister in Bangkok had raised objections to the draft of the new treaty. Apparently local British opposition in Bangkok was strong. The Foreign Office wrote to say that, in view of their Minister's cabled report, after further mature consideration they must ask for certain additions and modifications to the draft. A glance at the changes asked for caused one's heart to sink. To certain of them Siam could not accede. Did this, then, spell the end of all our hopes?

We rushed back to London, realizing that the fight there must be fought again in the face of the adverse report. Again a formal meeting was arranged between ourselves and the experts and representatives of the Foreign Office, the Board of Trade, the Indian Office, and the Colonial Office, together with the former British Consul-General in Siam, who had been summoned for the occasion. For a whole afternoon the battle raged. We sought to explain why Siam could not accept certain of the proposed modifications and why Great Britain should not make the mistake of requesting them; why some of the objects sought were quite unnecessary and how others might be attained in more practicable ways. It was one against many, and the battle never flagged. 'You reminded me of Daniel in the lions' den,' exclaimed one of the British representatives at the end of the afternoon. But, when the smoke of battle cleared away, the sun was shining. Great Britain had agreed to withdraw all the objectionable modifications, or to alter them to a quite unobjectionable form. The British treaty was won. During two more all-afternoon sessions such difficulties as remained were ironed out; and in individual conferences during

the next ten days solutions were found for several highly technical but extremely difficult legalistic problems, and in addition a Treaty of General Arbitration was negotiated and agreed upon. By the middle of July the General and Commercial Treaties were ready for signature. We hurried down from Stockholm for the signing; and on the afternoon of July 14 Mr. Chamberlain and Phya Prabha Karavongse, the Siamese Minister to London, unostentatiously attached their signatures and seals to the documents of such vital importance to Siam. The new British treaty had come into being.

VIII

In the meantime we had been turning our attention to the Scandinavian countries. Denmark, Norway, and Sweden still remained; also Italy. Should any one of these countries refuse to give up its existing rights, Siam would remain bound by the old three-per-cent tariff restriction; for all the new treaties contained the provision that Siam should be free to raise its tariff only after every one of the nations holding irrevocable treaty rights had freely and without compensatory benefit agreed to surrender them. Apart, therefore, from the existence of considerable Scandinavian shipping interests in Siam, each one of these treaties was a matter of large importance to Bangkok.

In Copenhagen, in Stockholm, and in Oslo, where Siamese interests are in the hands of Prince Wibun, accredited to these three capitals, again we encountered an open-mindedness, a sympathetic understanding for the plucky struggle of a small nation, and a readiness to translate sympathy into practical action which showed that, in spite of much that is said to the contrary, European foreign offices are not

all closed to liberal sentiments. All three of the Scandinavian countries declared themselves ready to meet with Siam's desires and to give new treaties. In Denmark and Sweden, through the help of influential friends at court, negotiations were expedited and final agreement came to on the drafts of the treaties, which were to be signed as soon as the parliamentary committees could formally signify their approval in the early fall. Norway also promised a new treaty along the same general lines, and quickly agreed in principle to the draft which we proposed.

In Oslo came word from Lisbon reporting that our Portuguese treaty had gone on the rocks. To protect her port and Madeira wine, in which her wealth largely consists, Portugal insists on the insertion in her treaties of a clause for the punishment of all who sell wine labeled 'Port' or 'Madeira' not coming from Portugal or the island of Madeira; in the Siamese treaty the formula had been considerably modified so as to avoid possible difficulties with British and French merchants selling these wines in Bangkok. The formula thus modified had run afoul in one of the Portuguese legislative committees; the treaty had therefore failed to pass and there seemed a not improbable chance of its total shipwreck.

During the four days' train journey from Oslo to Lisbon urgent cables were dispatched to Bangkok and various telegrams exchanged with Lisbon, so that by the time we reached the Portuguese capital the way had been opened to agree on a new formula which would not endanger Siamese interests and yet would prove acceptable to the various groups in Portugal. Once in Lisbon, in intimate contact with Foreign Office officials who had become personal friends, it was not

difficult to agree upon a formula; but a new difficulty then confronted us. The Minister of Foreign Affairs with whom we had negotiated in April had been succeeded by another; his successor had been deposed as a result of a revolution, and so far no Premier could be found able to control a majority of the Chamber. As a result there was no existing Minister of Foreign Affairs by whom the treaty could be signed! We had, as it happened, come down from Paris on the train with the man who it was hoped would be able to form a Government. He ultimately succeeded in doing so; and one of the earliest acts of the newly appointed Minister of Foreign Affairs was, together with Phya Sanpakitch, the Siamese Minister to Italy, Spain, and Portugal, to sign the treaty with Siam.

IX

It was then late in July; we stopped a few days in Madrid to give to the draft of the Spanish treaty its final touches preparatory to its signature, and hurried on to Rome, reaching there the first week of August. The Italian treaty was the last one remaining, but the way to its attainment seemed beset with difficulties. Since the preceding April various telegrams had been sent to the Italian Foreign Office urging the hastening of negotiations; but these had failed to bear fruit, and a bare three weeks now remained before it was necessary for me to return to America. Unfortunately Rome was in the throes of intense summer heat, and the majority of Foreign Office officials were away on their vacation. Apparently the only hope of success was to go straight to Premier Mussolini, convince him of the importance of Italy's not being the single nation to bar Siam's right

to full fiscal autonomy, and urge top speed. With his aid it might be done; he works with the speed and precision of a steam turbine, and by the force of his compelling, dominant will drives the Italian machinery of state at a pace that it has never known before.

The Marquis Paulucci de' Calboli Barone, the Chef du Cabinet of Premier Mussolini, seemed considerably impressed by the situation. At the close of our discussion the Marquis expressed the sincere wish that Italy might meet with Siam's desires and that the new treaty might be negotiated at once, especially since the Siamese Government had felt obliged to ask for the withdrawal of negotiations were the draft not agreed to before my departure. 'But,' he added, 'unhappily we are blocked by physical impossibility. The Foreign Office officials are away on their holidays. There is no one in Rome competent to negotiate the treaty.' 'But,' we asked, 'can they not be recalled?'

This was a question which only the Premier could decide. The Marquis Paulucci promised to take it up with him immediately. For three days we waited, holding our breath; on the fourth, word came from the Italian Foreign Office that telegrams had been sent out to various Foreign Office officials calling them to Rome, that a Treaty Commission had been appointed, and that they would meet with Siam's plenipotentiary on the following Wednesday, August 19. That gave just nine days before I had to leave Rome to catch my steamer for America. Again the gods were favoring us and we had a fighting chance.

During the intervening days we got into personal touch with certain of the Italian representatives on the newly appointed Treaty Commission and talked over several of the more vital issues. None of the Commissioners

thought it possible to conclude the negotiations within a week, yet we felt that if there was a will a way could be found, and we mapped out a programme accordingly. The first clash came over the question of the language to be used for the treaty text. The Italian Commissioners wanted it to be in Italian. At our first meeting, however, they agreed to accept both an English and an Italian text, with the English one controlling; and we then proceeded to formulate a programme of action for the ensuing week. Siam agreed to prepare and present to the Italian Foreign Office on the following day a treaty draft in English and Italian; the Italians were to study this and meet with us two days later to discuss counterproposals; and every day thereafter the Treaty Commission would sit with us until the work was completed.

Evidently Premier Mussolini had issued orders that things were to move, for this programme was followed out to the letter. During all those crowded days and nights — for there were times when the lights in the Siamese legation burned till morning — there was never an hour wasted. The Treaty Commission, at considerable personal self-sacrifice, held long, protracted sessions with us, discussing our proposals, arguing against some of them, presenting counterproposals. We defended and maintained our draft in all the essential points, but yielded wherever possible on the nonessentials and on all matters of pure form. By the following Monday we had apparently come within sight of final agreement. The Italian Commission seemed ready to accept a text which was thoroughly satisfactory to Siam. Nevertheless, Italian desires remained unsatisfied as to five remaining points, which Italy felt a *sine qua non* for the granting of the treaty, but to

which Siam could not agree. For two days the debate raged. At length the Italians on three of the points agreed to accept modified formulas phrased in such a way as not to endanger Siamese interests, but on the other two deadlock resulted. In the end the only course open was to refer the impasse to Premier Mussolini, who alone was responsible for the final decision.

On the day before our departure from Rome we were ushered into Signor Mussolini's office at the Ministry of Foreign Affairs. In the quiet of a palatial room lined with radiant old Italian pictures he arose from a desk in the corner to receive us. As he advanced I could not but wonder at the gentleness of his eyes, set in a powerful, clean-cut face — a face which with all its strength had nothing in it of hardness. He spoke simply and to the point. He told us that Italy had always felt friendship for Siam, and that in token of that friendship Italy would withdraw the fourth and fifth demands. The last treaty, then, was won! After seventy years of extra-territoriality Siam was to be once more autonomous and free.

X

All the new treaties, including one with Belgium negotiated in Bangkok, are now signed and ratified; and extraterritoriality in Siam is a thing of the past. With its passing, and the removal of the old fiscal restrictions, new vistas open out. How has Siam been preparing herself for the new period into which she is entering? Will she be able to exercise wisely her new power?

King Rama VI died in November 1925, soon after the completion of the treaty negotiations. During the close of his reign expenditures were exceeding

the national income and a financial crisis loomed ahead.

With the accession to the throne of his brother, King Prajadhipok, vigorous measures were taken. Instead of negotiating foreign loans or increasing taxes, the new King adopted the more salutary method of eliminating needless and extravagant expenditures. He required each ministry to prune away waste, to dismiss supernumeraries, to abolish sinecures. Economy became the watchword of the day. Bravely he led the way by reducing at a single stroke the revenues allowed for royal expenditure from nine million to six million ticals. His earnestness was irresistible. As a result Siam has turned its deficits into surpluses; and the present intention is deliberately to budget for surpluses so as to build up substantial reserves. In view of the great natural wealth of the country, in view of the increased revenues made possible under the new treaties by slight increases in duties on widely consumed articles, in view of the practicability of improving the rice crops and introducing other secondary crops, Siam's financial future looks very bright.

In constitutional matters a similarly vigorous policy has been pursued. At the end of the last reign the sovereign had been more and more successfully isolated from the best counsel of the realm by a group seeking its own ends. One of the new King's first acts was to dismiss from the high offices which they had attained the leaders of this group. Simultaneously he created a new constitutional body to give to the sovereign advice on high matters of policy; this Supreme Council of State, composed of five men, was small enough to impress responsibility on each of its members. Upon it he placed some of the ablest and most sincere of Siam's leaders. By this adroit and

statesmanlike move not only was an avenue of access to the King opened up, but Siam gained what she badly needed — a single body to help coördinate and unify the work of the separate ministries.

Troublous constitutional problems still remain. His Majesty keenly appreciates the difficulties and dangers of absolute monarchy; he has a sincere desire to democratize the government and to shift part of its responsibilities to the shoulders of the people. But a parliament uncontrolled by an intelligent and interested electorate is a far more dangerous engine of tyranny than an absolute monarch; and, until the groundwork can be built by pushing forward the work of general education, the parliamentary form of government must wait. Programmes, nevertheless, can be formulated looking toward this goal; and in the meantime the King is hoping to develop the people's political experience by creating popularly elected municipal councils in some of the larger cities.

Siam's judicial problems are already well in hand. The patient and thorough work of the Code Commission has borne fruit in able codes of law based on the best European models. Five years will probably be required for the completion of these codes. The most important part of the judicial ground-

work yet remaining is the teaching and training of Siamese judges.

Further progress demands special activity in two directions — the one the vigorous pushing forward of general education, which is made exceptionally difficult by lack of trained Siamese teachers and Siamese textbooks; the other the stimulation of agricultural productivity by standardizing and improving the rice crop and by introducing secondary crops such as tobacco and hemp.

Underlying all else is the problem of how to assimilate the best of Western civilization without being corrupted by the demoralizing forces with which that civilization seems inextricably bound. Of all possible future dangers to Siam perhaps here lies the greatest. Will she be able to incorporate the best from the Occident and yet retain sufficient poise to maintain her own distinctive individuality, to assimilate things Western and yet not be swallowed by the West? Can she prevent religious and moral values becoming subordinated to material ones?

Indeed, Siam has problems a plenty. But these are a sign of progress. Those who have lived and worked in Siam and come to know and love her people have great faith in the Siamese. They will find a way. Siam's star is rising.

MANNING THE MIDDLE WEST'S MACHINES

INDUSTRY'S LATEST ANSWERS TO RESTRICTED IMMIGRATION

BY ARTHUR POUND

I

THE cities of the Iron Men have kept on growing in size, efficiency, and social competence during the five years which have elapsed since the first 'Iron Man' paper was published in the *Atlantic*. The physical growth itself is enough to make one marvel at the power of tools and jobs to shift social orbits. Of these cities the one I know best had a population of 13,000 in 1900, 38,000 in 1910, 93,000 in 1920, 152,000 (by government estimate) in 1925; it will have 160,000 surely by the time this article is published, with the prospect of 200,000 by 1930. Whence comes this never-ending stream of humanity—individuals, brides and grooms, families?

In 1921 this city was still digesting painfully a too heavy diet of immigrants received from 1905 to 1914, when the war unexpectedly shut off the flow. The high spots on the city's social map were then the various foreign colonies—Polish, Italian, Serb, Hungarian, Czech, German-Russian. After five years these colonies, while still present, are less noticeable and presumably less influential in holding their people to the old ways. The crust of old-world custom is weakening in many respects, though not yet to the extent of shutting off the supply of homemade liquors manufactured in sections where the older housewives still think boudoir

caps the fashion for shopping expeditions. But no more 'green' foreigners are arriving to stiffen old customs and to reënforce, through necessity, the use of outlandish tongues. Outwardly, in both raiment and bearing, the foreign men who were newcomers fifteen years ago are almost indistinguishable from the natives; their women reveal more of the European peasant influence, but the department stores are bringing them slowly but surely into line with American fashions.

Whence and of what sort are the folk who have taken the place of European immigrants in this procession toward these rising industrial centres?

Even at the crest of the foreign invasion the demand for labor drew heavily on farms, villages, and small towns. The northern part of Michigan's lower peninsula, once busy with lumbering, but a region with much waste land and no large-scale manufacturing industry, has been sending its surplus man power to the automobile cities for twenty years. So also have the copper and iron sections of the upper peninsula, their contributions increasing or decreasing relatively to market prices for minerals and conditions of employment. These flows still continue, and are at present brisk, to the delight of the employment managers.

From factory and school records I

gather that the population of this absorbent city is now being recruited from the following areas in the order stated: (1) the northern half of the lower peninsula of Michigan; (2) the upper peninsula, notably the iron and copper country; (3) the South; (4) Canada; (5) Mexico; (6) the British Isles; (7) New England.

While floaters drift in by ones and twos from other sections than those named, this sequence is agreed to by all in close touch with the new arrivals — school authorities, employment managers, social service workers, church missionaries. Also there is general agreement on the social values of these various groups from the standpoint of the community and its industries.

New England sends skilled men only, chiefly expert mechanics who readily find work in the tool shops which supply the production machines with those precise appliances which permit close work in spite of quantity. I am told that it is easier now than ever before to get skilled mechanics of New England to change base, a point which the industrialists of New England may well ponder deeply. This reflects, I suppose, the growing conviction among conservative wage-earners that the mass-production industries of the Middle West have passed through the trial period and are now stable enough to tie to for good and all. Socially these New Englanders 'shake down' without a ripple into a community which still reveals unmistakable signs of having been pioneered by New England stock, via New York and the Western Reserve.

Of the British, whether coming direct from the British Isles or by way of Canada, only fair words are spoken in quarters where I expected to find some of that adverse criticism of the cockney so frequently overheard in

Canada. Perhaps the reason for this difference in the welcoming note is to be explained by the fact that Canada seeks immigrants who will go on the land, a location as much in disfavor with the urban Britisher as with the urban American. In our Michigan cities this consideration does not apply; they want shop men, and these newcomers from Britain fill that bill admirably. Moreover, it is significant that in this so-called 'open shop' town, a somewhat euphemistic term in view of the penetrating questions that are asked about union affiliations in advance of hiring, employers are entirely satisfied with their new British hands on the score of unionism. No doubt the latter were union men in tightly organized Britain, no doubt going on strike is an old experience for them, but they have left all that behind them. This is a new deal and a better deal, from the standpoint both of wages in hand and of opportunities in sight, and the newcomers are accepting the terms as offered, apparently without reservation. All of which fortifies the view that labor unionism is a defense reaction; even he who is a bitter unionist in a severe economic environment loses interest in the cause when he strikes better pickings. The unions have never made any headway in the automobile trade, for the good reason that they have nothing to offer which will appeal to these highly paid men as worth the bother of going after.

Canada's contribution to the citizenry of Motorland consists chiefly of Scots and English stock from near-by Ontario, with a smattering of French Canadians not yet important numerically. The Order of the Scottish Clans has chapters in all the automobile towns, and the birthday of Robert Burns is coming to be celebrated with almost as much feeling by Americans

of Scotch blood as St. Patrick's Day is celebrated by Americans of Irish blood. But, except on these festival occasions, the Canadians are indistinguishable from the native population.

Not so, however, with the sons of that other border beneficiary of our immigration laws — Mexico. Six years ago one heard of Mexicans in Detroit, but nowhere else in the automobile belt. All through the war period the quiet little brown brother worked his way north and east along the railroads, supplying the demand for section hands which the Italians met earlier, not only on the 'Delaware Lackawan', as the popular song runs, but also far into the Southwest, where rival Mexican and Italian gangs gave economic, and occasionally knife, battle. Now every Michigan automobile town has its Mexican colony, the only foreign colony of recent origin. Among three hundred men whom I saw applying for work one morning at a single plant, twenty-four were born in Mexico, and eight with Mexican names were born in the border states of the Southwest. With employers they have earned a good name as substitutes for the Italians, under foremen who know how to handle roustabouts in gangs. Patient and enduring though they have proved themselves to be, it is not thought they can stand the gaff of rapid and continuous production in the shops. Race does not seem to enter into the calculation at all; one of the top engineers in this same plant is a Japanese. Altogether the employers incline to be hopeful of the Mexicans, and the other workmen tolerant of them. Their manual dexterity, upon which the new educational system in Mexico is so largely based, has already attracted attention in these Northern factories; one employment manager said that he was continually being surprised by the beauty of Mexican handwriting as he

saw it on applications for work. So it is possible that the Mexicans may find their way to production jobs and even to white-collar jobs. However, white-collar jobs rate little if any higher here than shop jobs — a healthy sign!

This testimony bears out precisely an opinion I frequently have met with among American employers of Mexican labor in Mexico — to the effect that, while Mexicans are not the world's best workers, they assuredly are not the world's worst. The fictitious 'greaser' villain of the films, fortunately, has not migrated from wherever he does his dirty work.

II

Come we now to the South, third largest contributor to the population of this thriving Middle Western city. Of the three hundred applicants for work at the plant on the January morning when I visited the employment office, ninety-nine were born south of a line drawn east and west through Indianapolis. There were considerable quotas from southern Indiana and Illinois, and small delegations from as far away as Texas and Louisiana, but the large blocks were from Tennessee and the Ozark country of southern Missouri and northern Arkansas. The superintendent of schools, after running hastily over the returns of the recent school census, lists Missouri directly after the two Michigan districts mentioned earlier as leading sources of the new population. The head of the Social Service Bureau, the Poor Commissioner, and a home missionary in one of the poorer sections of the city spoke, more in sorrow than anger, of 'poor white trash' when I asked them which element in the newer population required most public relief. So, beyond a doubt, the Southern contingent is growing.

The Southern drive on Northern industrial centres is no new phenomenon; but its present complexion is lighter than before. Southern negroes came north in droves after the war, but many have now returned to warmer climes, leaving the residue in Black Belts usually sandwiched between tolerant foreign groups. The movement continues, but the blacks have definitely yielded precedence in it to whites. Of the ninety-nine Southerners applying for work that day, only fourteen were negroes.

Local industrial testimony on the value of this Southern white labor is a little disconcerting to one who is at all prejudiced in favor of his own color and racial type. The Ozarks are frequently described as one of the two breeding basins of pure-blood Anglo-Saxons in the United States. Here are men of the good old stock, whose forefathers no doubt fought in the Revolution; and yet, on the basis of the record, they are the least satisfactory men to hire of the extremely mixed population which presents itself at the gate.

A company lawyer, in charge of compensation cases, described these Southern whites as 'physically and intellectually sluggish. They get hurt more easily and stay hurt longer than any other class of labor we have.' When I protested that this might be due merely to industrial inexperience and the difficulty of acclimating themselves, he said: 'Then they ought to break in as easily as Italian peasants, but they don't.'

The employment manager was more specific, but equally condemning. He said: 'When I first encountered the Southern mountaineer type, during the war shortage of labor, I thought, "Here is just what the country needs in this emergency — an untouched labor reserve of tall, rangy American citizens, hundred-per-centers." So we

sent down to Tennessee for a batch. I soon saw they were not so strong as they looked. We tried to correct that by good feeding, since the men were housed in barracks and fed from a company kitchen. But you can't correct the results of years of under-feeding by stuffing the victims to-day and to-morrow and the day after to-morrow. We did fill up the hollows in some of the gaunt frames, but we could not fill the hollows in their minds. They never seemed to get the idea that work is a serious business. They dawdled, laid off, played off, sulked, and in general behaved like irresponsible children. I think they might do better, a great deal better, at industrial labor in their own country, being greatly attached to kin and boyhood scenes. Southern industry appears to be doing well with labor we can't use. One trouble with them in the North is homesickness. Of course there are exceptions, but they are too few to bank on.

'This industry — in fact every mass-production industry — must accent reliability. When one man lays off or shirks he slows down output along the line. For the mass of our workers a high degree of skill is not important; but steadiness is all-important. Consequently my experience has taught me to put almost any other sort of man on the job in preference to a white Southerner. He lacks the patience of a green European peasant, who will stick by a stiff, disagreeable task in order to get a foothold in this country, or the rough-and-ready good humor of the Southern negro, which helps the latter to bear many disappointments during his first weeks in the North.

'I have been hiring men for twenty years. After testing theories found in books and presented in conferences on employment psychology, I have arrived at a simple little theory of my

own which has the merit of working nine times out of ten. It is simply this: cold weather makes the best men for our business. While I was under the influence of Mrs. Blackford, I used to study an applicant's features; now I study the answers on his questionnaire. Where was he born? What stock is he? Where did he work? If he was born north of Saginaw Bay he is almost certain to develop into a reliable worker and a good citizen.

'One time years ago I brought three hundred and fifty men down here in a body from the upper peninsula of Michigan. All but fifty of them are still working in this plant. At least one hundred and fifty of them bought dwellings in one of our company subdivisions and live within eight or ten blocks of my home. They are downright good citizens; no town could ask for better citizens, and no employer deserves better employees than those men are. Not one of the whole three hundred and fifty ever fastened himself like a leech on the city's poor fund or its charity. In fact, it's a rare thing to be disappointed in a man from up State or any other place where the frost hangs on a long time. That's why I say latitude counts.'

After this testimony to the correctness of one of the major premises of Buckle's *History of Civilization*, I talked to the church worker in charge of a mission in a creek bottom. One of the most encouraging things about this busy city is that it grows too fast to let a slum come to foul maturity. Real-estate values change quickly, and a progressive building code prevents the worst evils of overcrowding. In general the housing is far better than the Eastern level for industrial labor, the standard dwelling being an isolated one-family house standing on its own lot. But occasionally and temporarily one may find a neighborhood that gives

every indication of becoming a slum if allowed to fester a few years more. Such was the creek bottom; each house stood on its lot, all right, but most of them were shacks and the others showed grievous neglect.

'Our neighborhood,' said this church worker, 'seems to be especially favored just now by incoming Southern whites. They take one another in with the utmost hospitality. Frequently I find myself wondering where the duties of hospitality end and those of thrift begin. You will find it hard to believe the backwardness of these kindly people; their coming has been a revelation to me of the illiteracy and domestic sloth prevailing in the regions they still call home.'

'Recently I visited a young woman who is the mother of three children and is hourly expecting a fourth. "I hope," I said, "that you know Jesus." "Lady," she replied, earnestly, "I kain't say I do know that party. I'm so busy with my brats I kain't get out much."

'In another house I asked the mother if she had a Bible. "Lawdy, yes," she replied proudly; and going from the room she brought back a medical almanac, saying, "This is the book, miss." At first I was completely mystified. Then it dawned on me that she could not read and came from the section where the Bible is "the book," the only book in any house. Any book of any sort meant "Bible" to her.'

The secretary of the Social Service Bureau is equally unimpressed by these newcomers. 'The best thing I can say for them,' she observed, 'is that a good many of them ask for help before they have been here long enough to earn a legal residence; that enables us to buy half-fare paupers' tickets and send the whole family back home. There usually is a family, you know. A man of

twenty-four motored into town from the Ozarks in a battered car with less than a dollar in his pocket. This is a busy town, all right, but no one ought to bring a family here with less than one hundred dollars in hand. Even when jobs are plenty a few days may be required to find one. Yet, as the factories are rather chary of Southerners, most of them become day laborers on construction jobs subject to frequent lay-offs. South of the Mason and Dixon line the idea seems to prevail that our streets are paved with pay checks. Would you care to look over these recent cases?'

Running through the typed records of indigence, I was not surprised to find, among many new names, several of the old stand-bys. Eight years ago I had administered Red Cross relief to these same families, enabling them to weather what seemed to be a temporary slump in their fortunes, due to the absence of a breadwinner. At least that was always the plea; yet here were some of the old faithfuls just as hungry and cold and ill-starred as if peace had not been declared nine years ago. While I sat musing on the vanity of human charity, and the stability, for better or worse, of character, in came the Poor Commissioner, sputtering, as befits a guardian of the public purse during an economy régime.

'Here's a case I'll let you decide. Woman wants coal and groceries. House half paid for. Says her husband has taken the car and gone to Florida. I say automobiles and charity don't mix. If there's a car in the family, no free coal. Is n't that a sound rule?'

I had to admit that it was; furthermore, I was almost ready to admit the futility of charity in general. Here is a city which, compared to the country at large, has reveled in prosperity. Wages are high and work is relatively steady. Moreover the local custom of selling

real estate on contract with small down-payments, coupled with a thundering propaganda to 'own your own home,' makes it easy for a man to get a start. A stake in the community, so secured, is more likely to increase in value than decrease — will surely increase in the hands of a dogged man who hangs on to it through a temporary slump. A veritable stream of wealth has been pouring through this town for twenty years, occasionally slowing up, but coming back with renewed force later. Old families have grown richer, and newcomers have acquired riches; hundreds of rank-and-file workers have built up snug little fortunes in real estate; even outsiders, who have never set foot in the town itself, have cashed in on its earnings. But still there is a backwash of poverty on the shores of this golden flood; here are some who are just where they were eight years ago, just where their parents were twenty years ago — on the rocks. If ever chronic poverty could be cured by prosperity, these poor-relief rolls would be blank.

III

Unquestionably, however, the general level of well-being has risen. The men look better fed, better clothed, better satisfied. Unrest has pretty much departed from their conversation and demeanor. Since I saw them last they have had six more years of drilling under highly competent, and withal just, leadership. Many of them, through a joint savings fund under company control, have come into possession of stock in the enterprise. The operation of the savings fund, in which a dollar saved grows into eight or nine dollars in five years' time, gives general satisfaction. It is not unusual to find ordinary production men of no particular skill whose dividends and profits from the savings fund run to

a third of their annual wages. The result is a distinctly higher morale; what these workmen have lost in power to command their own destinies seems to have been compensated, not only by money, but also by the acquiring of just pride in a joint undertaking. Their confidence has deepened, and dread of the future has gradually given way to a sense of security. Five years ago these men, drawn from diverse regions, circumstances, and occupations, were in the midst of a difficult social readjustment. There is no longer any chance to doubt that they have now made that adjustment, and on the whole have made it willingly, after weighing the personal costs and advantages.

One sees this clearly in the prevalent attitude toward welfare work, which used to be one of suspicion. 'Put it in the pay envelope and let us spend it ourselves, instead of hiring white-collar boys to help real men who want nobody's help.' That was the old cry, with its unspoken appeal to the American tradition of independence. But now experience has shown that, in this particular town, welfare work is not a substitute for wages earned but not paid. The cash has come. Consequently the welfare workers get kindlier welcomes when they inject themselves into personal and domestic problems of employees. Among the older employees it is now generally understood that this particular welfare work is something more than a way of building company morale; it is an effort to bring the standards of living of the whole industrial group up to those which the more competent of the employees maintain for themselves, without guidance or assistance.

There is a legend hereabouts that little children, their noses glued to the windows while they wait for Father, rush to the door to ask him, 'What's

G. M. to-day?' That, however, is merely the hearty Middle Western way of exaggerating a good thing. The truth is that an extraordinary number of citizens, from factory roustabouts to bankers, hold stock in the foundation industry of their community. Some of these stockholders have risen to wealth thereby and take their new-found affluence rather boisterously; but the majority just plug along in the old ways. Saddle horses grow more numerous and there is talk of fox hounds and hunting; yet few quit work when fortune comes. After all, theirs is a civilization and prosperity founded upon hard work, and as such less given to exuberances than those founded on play in a blissful climate. Moreover the city is fortunate in that the social responsibilities of wealth have been emphasized repeatedly by local leaders. So, while one hears overmuch of money when General Motors is fluctuating briskly, at other times one hears far more of the new junior high school, the rising technical college, and the extension of the park system. During my last visit the scholastic triumph of two recent high-school graduates in passing the Eastern college board examinations was heralded as big and bracing news, which it was. Verily there is a strong and wistful spirit brooding behind the formidable mechanisms of Automobileland. These folk are going so fast that they neglect some things worth doing, but they will get around to those in time, never fear.

Perhaps the most heartening of all the movements under way in this dynamic environment is that which has accepted and now builds upon the thesis of the first Iron Man paper—the recognition that mass production involves such limitations on human nature that the fullest expressions of personality, for the routine worker, must come during his leisure time.

The city, at this stage, gives every evidence of conviction on that point. Against the hindrances of sparse natural advantages, the park system has been pushed forward steadily, mopping up dumps and other eyesores in its progress. In the parks, which are connected by boulevards, are swimming pools, baseball diamonds, and a municipal golf course, which has proved so popular that two more are being added. The existing municipal course, crowded from dawn to dusk on holidays and Sundays, is self-supported on a modest schedule of fees. The two new links in prospect are coming in answer to agitation for them in the factories. A comprehensive city plan, prepared by a noted expert and administered by a local board almost completely divorced from politics, guides this whole general development. In summer a vast deal of loving care is lavished on lawns and gardens, as might be expected where the ordinary house occupies an individual lot. There is also brisk travel every fair week-end to lakes and camps and cottages, for these well-paid workingmen are steady buyers of their own products, and not a few of them possess country nests as well as urban real estate.

Winter entertainment runs strongly to movies, but each year sees more enthusiasm and more provision for active winter sports, both indoor and outdoor. The amount of athletic activity generated in this hard-working population is prodigious, and, unlike many industrial centres, this community emphasizes the amateur side rather than the professional. The city never has supported professional baseball well enough to let it endure, and at present it has no league team; but there are literally hundreds of shop and neighborhood teams which carry through long schedules. These activities are largely guided by a mutual

association of the city's workers, whose clubrooms occupy five floors of the largest office building in town, devoted to recreation and education.

Compared with the tidy, well-groomed industrial towns of the East, this city always looks a bit unkempt, but that is because it keeps growing so fast that it never quite catches up with its needs. Yet I fancy one can see what it will be like a hundred years hence by stepping into the newest of its huge plants. Every industrial city, I think, follows in its social development the economic processes which provide the bread of life for the community and fix the habits of its producers. What one sees in these plants is industrial house-keeping of a high order, cleanly, systematic, coöperative, a mighty rhythm of toil in which tens of thousands of disciplined individuals keep step. Eventually the town will be like that, will be run as well as that, and will produce social boons to satisfy the common man just as regularly and as certainly as these plants produce goods to satisfy their customers.

The indiscriminate hiring of mere hands and muscles is no more; selection of employees proceeds upon the basis of character, upon the adaptability of the applicant to fit into a system which demands steadfastness and dependability. These, be it noted, are moral qualities, and as serviceable in citizens as in employees. The trend toward automatic production, while decreasing the responsibility of the individual, as a physical being, for the product, has increased his responsibility as a social being for that same product. The town depends on the works, and the works depend on the men, less as doers of this or that particular thing, because substitutions become less difficult, than as men of good intent who do what they have to do with a will.

An industrial school of this sort — and every manufacturing plant is partly that from the social point of view — is even more successful than a university in taking human material of all sorts, from widely diverse sections, and moulding men into a type. If, as seems likely, mass production becomes the paramount expression of our national energy, the process in which our science and organization find their most fruitful union, this Middle West type of factory man may become the typical American. There is cheer in that prospect. Compounded of many racial strains, he will stand

forth distinctly against the background of his huge machines as a man who insists on good leadership and a good living, and, having these, will do a full day's work without whimpering, looking to his leisure to satisfy those whims and crotchets of his nature which find no outlets in his disciplined, coöperative toil. His may not be the most inspiring environment in the world, but it will fit the type in both its advantages and its limitations, and consequently will produce a good deal of solid contentment — at least as much as man can stand without growing soft.

LETTERS FROM CHINA

BY NORA WALN

AT SEA
FROM BELAWAN TO SINGAPORE
Third Month 20-26, 1927

WE anchored in mid-harbor at Belawan. We have taken on only a few new passengers, among them an ardent Chinese revolutionist, now a member of the Kuomintang. He spoke to me yesterday on the upper deck, where it is my custom to read, and he has had his chair placed next to mine permanently — that is, as far as Singapore, which is his destination. He is in the Malay Peninsula to collect funds from the 400,000 Chinese resident there, who, he tells me, have been the financial backbone of the revolution since before 1911. His concern, an anti-Russian campaign in China. He speaks in staccato Mandarin, I suppose for privacy, although on this boat, where German is the language understood,

English would be equally secretive. His discourse is about as follows: —

'Papers have come into the hands of some of us in Hankow which make a break with Soviet Russia imperative — if China is to live as a separate entity. These papers show that the Russians look upon us Chinese with the utmost contempt and have offered us their friendship only that they may use the Kuomintang for the furtherance of their own aggressive scheme to annex China under Moscow.

'Our leader, Dr. Sun Yat-sen, accepted the extended hand of Russia, with gold in the clasp, shortly before his death, to bring new power into the Nationalistic cause. In the beginning our Russian visitors were cautious. They pretended to believe in our ideals. With insidious cunning they wormed their way into our innermost circles.

Once in, they slowly shouldered us Chinese from positions of leadership and usurped control of our Nationalistic activities.

'Secret meetings are held by Borodin, Galen, Petroff, Rolland, and their confederates in which decisions are made and orders which we have never seen are drawn up and issued under the Chinese Kuomintang seal. The posters, leaflets, and general propaganda, the most important feature of our campaign, have been taken out of our control by our "advisers." In Hankow no Chinese can enter the propaganda-preparation factory without the approval of Mr. Borodin — consequently thousands of ideas are spread broadcast which are not our ideals. More than three hundred confederates have come from Russia to help the original advisers; they are all kindly paid from Moscow, through the Soviet Legation at Peking. The attitude of "non-interference" on the part of the other Powers leaves Russia a clear field.'

I could not resist asking him if 'non-interference' is not the only possible attitude, and stressing the fact that China can emerge as a strong nation only if she works out her own problem.

Two days later

The astounding news of the Nanking disaster reached us by wireless to-day. Almost immediately our new Chinese friend came, with tears in his eyes, to offer us his assurance that he speaks in the tongue of thousands of his countrymen when he says that it is an incident deeply regrettable.

I find it almost impossible of belief. Nanking is my best beloved of all the Chinese cities in which I have lived. There are no foreign concessions. All races have lived in harmony within the walls, and friendships have been without barriers of creed. Most mystifying is the list of the dead: Mr. Williams,

Dr. Sachell Smith, Mr. Huber. All men of long residence in China, and all personally known to me as men strongly pro-Chinese in sympathy. Mr. Huber was with us in Canton and was one of the few men who went freely about that city during the months of tension.

MANILA, Fourth Month 2, '27

We have had six smooth hot days from Singapore. I revel in tropic heat, so quite enjoyed it.

At tea we heard the rumor that the Chinese Nationalist Party, right wing, has two representatives here scouting about for American trained officers to drill their soldiers — West Point graduates preferred and a good price paid for them, Filipinos taken as second choice. Half an hour later I met one of them, a cheery young man in Canton in the spring of 1926, but very much depressed now. He tells me that the Nationalist Party is in a sorry plight, betrayed by Russia, and that, although the right wing of the party now holds Nanking and Shanghai, it has not been able to shake off seven Russian military advisers who pretend to side with General Chiang Kai-shek in his quarrel with Borodin; but that Chiang Kai-shek has agreed to dismiss them if they can be replaced by advisers similarly efficient in the art of war.

HONGKONG, Fourth Month 6, '27

We came into Hongkong harbor at daybreak. The trim neatness of this English city perched on the rocky heights of Victoria Island never fails to thrill me.

Anne had her trunks packed to transship to the Canton boat, but Robin failed to meet her. We learned that trouble brewed at Canton and he was on duty with the Volunteers. She made an attempt to get upriver, but a shipping strike was imminent and no boat possible that day. While we were

at lunch a wireless came through from the American gunboat at Canton with greetings and word that Robin had started down by train.

The train is due to make the trip in four hours. Anne refused my companionship when she met Robin, and spent the rest of the afternoon and evening between the boat and the railway station, where she asked the whereabouts of the train at half-hour intervals.

The young horn-rimmed-spectacled Chinese clerk was most kind, telephoning up the line continuously. His messages went about like this: 'Engine trouble — train no can come to-day. Englishman on board makee much fuss.' — 'Can do. Have fix piece of wire. Quick come.' — 'Engine break down. Englishman take sleep.' — 'Engine one lung all right. Can come slow.' — 'Lung finish. Train dead.' Then at last, 'All right now. Hongkong have lend one engine.' Robin arrived at something after eleven.

While Anne was meeting the train I went to the Hongkong Hotel and was surprised to find the upstairs tearoom, where the orchestra plays, filled with Chinese. The steward told me he had n't a table. I was turning away when people began waving to me and calling greetings and I realized that the room was filled with Chinese friends from up the West River. People who never went away from home formerly now at an English hotel tea dance! They were there in full body — grandmothers and babies in arms as well as mothers and fathers and grown-up daughters and sons.

I had a delightful time going from table to table. They have all come to Hongkong to await the outcome of political conditions — frightened by Communism. They were thoroughly enjoying their holiday. Old Madame

Kwong, from Samsui, told me that she has put all her money safely in the Hongkong and Shanghai Bank. I twitted her on her former very emphatic views against the rightness of the British holding Hongkong. She laughed and answered, 'Confucius says, "Concern yourselves only with your own affairs; he who meddles in politics walks in a dangerous place."' "

SHANGHAI, *Fourth Month 12, '27*

I have been in Shanghai four days and go on to Tientsin to-morrow. The city is crammed with refugees from the Yangtze valley — Chinese as well as Westerners. All passages on vessels to Europe and America are booked for the next three months.

The streets are thronged with people who have arrived here, after unpleasant experiences in Chinese mobs, by hazardous journeys overland and by native river craft. A Refugee Committee has combed the city for every available private bed. The shops and the local residents have done their utmost in replenishing depleted wardrobes. Many people were unable to bring anything save the clothes they wore, and often were forced en route to give up garments which pleased some passing bandit.

Everywhere I hear tales of wanton destruction of property — drugs thrown away by looters, surgical instruments smashed by demoniac mobs, schoolbooks burned, furniture broken. Every individual with whom I have talked is more concerned about the fate of Chinese friends who could not get away than about material property.

Mrs. Su Ling-fu told me that the wells of her native village are filled with suicides following rape; that the gray-haired elders were paraded through the streets in grotesque high hats with nasty placards hung from their necks,

and that her uncle was killed by the checkerboard death — a square of flesh cut away daily. Anyone possessed of property to the value of more than seventy-five dollars was labeled a capitalist and the property seized. She says that the Nationalists preceded their arrival with propaganda and came into the village without bloodshed. She was one of a committee to welcome them. For one week they gave promise of a splendid future. The village breathed a sigh of relief that the day of war lords was over. Then the contingent was changed. The first soldiers went forward to new territory and men came instigating the reign of terror. With antiforeign demonstrations, parades, and meetings they stirred the mass to a fever — then turned the excited mob on local citizens.

I went to see a medical missionary from upcountry who, I had heard, came from the district where Mai-da's maternal grandmother lives. I found her ill in bed in a large dormitory-like room where there were ten camp beds, and half a dozen children fretting in one corner. She had no news for me — her hospital was looted and she escaped in a boat, hidden under a load of hay by a farmer on whom she had operated for cataracts last winter. She also said that the Nationalists had been met with enthusiasm in her district — she had taken part in a joyous demonstration. Then a reign of terror had been instigated by agitators not native to that place.

I went to tea dances at the Astor House on two afternoons. There I saw the same type of crowd as in Hong-kong, with a more liberal sprinkling of Westerners. Not many local residents, but nervous refugees who feel the need of constant activity to keep sane. All have the same glassy eyes — as though they had experienced horrors of which they dare not think.

The Shanghai Settlement and the French Concession are surrounded by trenches and barricades of barbed wire with soldiers at every point of entry, but I felt that I must see Zung-wei's baby, so I went into the native city. She is hoping to get a flat in the Settlement before long, as she does not feel safe outside. Her baby is a chubby darling just learning to crawl. She said that all modern Chinese, like herself, are in a curious predicament — theoretically they are against foreign concessions, and yet these are the only refuge in the present upheaval.

She says that the Nanking disaster is clear to Chinese intelligence! General Chiang Kai-shek had a quarrel with Mr. Borodin at Hankow, voicing the resentment felt by all Chinese at the character of the Russian advisers. He departed downriver, and ahead of him went the command, by wireless, that each port at which he touched was to be disturbed by an antiforeign demonstration which would discredit him with the Western Powers. A score of Mr. Borodin's Russian confederates were in Nanking; the most rabid of Chinese Communists was head of the political bureau. General Chen Chien was temporarily in charge of the army there. He is senior to General Chiang in the Kuomintang and in the Nationalists' army, and embittered by the latter's rapid rise to power.

When General Chiang's boat reached Nanking the antiforeign disaster began. Chiang did not land and seek to seize control, but went on to Shanghai, where he gathered about him C. C. Wu, the son of Wu Ting-fang, the popular Chinese minister, Hu Han-min, and other conservative members of the Kuomintang who have been at variance with the left wing since the early days in Canton. Orders similar to those sent to Nanking were sent from Hankow for a demonstration at Shanghai,

but were not carried out. Chiang returned to Nanking with his cabinet and succeeded in assuming control.

. TIENTSIN, *Fourth Month 20, '27*

I arrived at Taku Bar about five o'clock last Fifth-day afternoon. When the pilot came aboard to steer us to a safe anchorage, he told me that his office had received word I was to wait on the ship until my husband came for me. I waited until ten the following morning, and then went up-river on the ship's tender. The Hai Ho is very narrow; one can almost reach out and touch the bank on either side in places. We had to draw up in widened harbors at intervals to allow ocean-going craft to pass. Many of these vessels were loaded with Chinese farmers and their wives en route to Manchuria. It was three o'clock when we neared Tientsin, to find both banks of the river lined with soldiers in the uniform of Marshal Chang Tso-lin's army.

They did not appear to be engaged in actual warfare, although it is difficult sometimes to tell in this country, where warriors put up their umbrellas or brew a cup of tea at need regardless of orders to charge. They had stuck their flagstuffs in the ground and some of them were asleep. Our boat pressed on between the lines until we sighted a Japanese oil-burner, and saw that soldiers fired into the water in front of her every time she moved. Just as we stopped I saw my husband walking along the bund and waved to him. He came to the bank and explained that the now ex-governor was suspected by Chang Tso-lin of a plot to hand Tientsin over to the Nationalists, had fled from his residence, and was thought to be on the Japanese boat.

We walked to our house, which is in the ex-German concession, now Chinese territory. The place is surrounded by

high walls, and has two entrance gates and a drive which curves up under stone pillars which reach to the roof. We have lovely old trees and a good-sized garden, entered through moon gates, with a cool summerhouse at the far end. There is a hedge of white lilac in full bloom.

I found the house full of refugees — all old friends, so it is very nice. We have had a doctor from the interior, but he is gone. He wrapped many of his surgical instruments in small packets and hid them in the roof of his hospital; all property in his section has been systematically looted, but he hopes to have tools for work when he returns.

A Chinese who has left Changsha is with us now. He told me that the 'grand old man' of Hunan, a scholar much beloved by all Chinese people, famous for his library of classic literature which has always been open to public use, was killed by the government which is in authority there, and his library burned, because he would not put his personal seal to a proclamation advocating Communism.

And in Peking twenty students suspected of an interest in Communism, many of them under twenty years of age, have been strangled by the old method, without trial. This is a cruel death — the victim is made to stand against a board on which a rope is passed through two holes; with his neck in the noose, a lever is pulled and he is partially killed, then revived, then choked and revived alternately for twenty minutes. The condemned are made to stand and watch their fellows die — the one most seriously condemned to wait until last for death.

As a Chinese friend who called on me yesterday said, 'Confucius taught that the government which gave the largest personal liberty to the largest number of people was the ideal — but the day of Confucius is dead.'

TIENTSIN, *Fifth Month 1, '27*

The little Manchu Emperor, Pu Yi, — or John, as he prefers to be called in English, — was at the St. George's dinner dance at the Country Club, accompanied by one Empress. He is a pleasant lad of twenty-two years, but looks weak, no doubt the result of royal inbreeding. His favorite pastime is trick bicycling. The Empress is a wax doll — a creamy skin, soft brown eyes, brows like the arch of a butterfly's wings, and masses of glossy black hair. She is very slender.

Mai-da has explained to me that when the Emperor receives invitations from Westerners his two Empresses take turns in accepting, as they are aware of the foreign custom which makes it bad form to fetch two wives. She says that few people can distinguish between two Manchu ladies of equal slimness and corresponding age. In response to Chinese invitations they both go. They were both at Kissling's this morning buying chocolates, and are equally lovely. They have a modern house in the Japanese Concession and are going up to Peking next week on a sight-seeing tour, as they had no opportunity to see the city when they were confined to the routine of palace life. They are much interested in America and keen to visit there, 'if travel were not so expensive.'

On the twenty-seventh we went to a dinner given by the Minister of Finance and his wife, Mr. and Mrs. Chwang King-ko at Foh Loh Lin. The tables were decorated with colored seeds sprinkled to depict historical scenes. I must learn to do it. As usual with official dinners, the menu was most tedious — I kept count to twelve courses. After dinner we had a gorgeous time. They took us to a Chinese theatre at which Mei Lan Fang was performing.

A Chinese theatre is a combination

of social club and stage. The play continues for many hours. It pleases my senses better than the timed precision of the Western stage, where the plot clicks to an arranged climax.

Yesterday our house steward spoke to me about the gardener, who he said would have to go. In the early days of my marriage I had ideas as to who should control matters domestic, but I was politely broken to the yoke of Chinese control, so I could only nod assent. To-day he is gone. Lee the younger, for many years gardener to the tupan of Shantung, son of Lee the elder, our gateman, has been summoned. It will be a matter of three weeks before he can receive his father's letter, close his Shantung affairs, and arrive here. In the meantime our seedlings must be transplanted. I discovered Mou, an upstairs 'helper,' who has a flair for gardening, at work on them this morning, and have been helping him. At the same time I have gleaned some knowledge of Chinese secret societies.

Mou has friends in four: Red Spears, Yellow Sands, Flower Basket, and Heavenly Gate. He, as well as his father, two uncles, and a brother, belongs to the latter. He explained that for years the gods have been anxious because of incessant warfare. They see how difficult it is for the honest, industrious people to plant their crops, gather their harvest, and keep their shops. So the gods take pity on a district and drop a sacred stone tablet with commands written on it, which if obeyed give the people strength and courage to protect their homes.

The tablet of the Heavenly Gate was found on the hillside near his native place one week after a Russian, two Cantonese men, and a woman had come to distribute leaflets and make speeches about a new government.

He says that his people have heard plenty of 'dragon's breath' and do not want a government. They want peace to worship their ancestors and beget children. The tablet gave instructions as to how to drive away all intruders. He says that all that the Red Spears are doing in Honan is to protect their native places. They do not care which side wins the war, but the gods help them to prevent its being fought on their farms.

Our acacia trees are a mass of buds which send forth a fragrant perfume.

TIENTSIN, *Fifth Month 25, '27*

On First day we were the guests of the Hai Ho Conservancy for an all-day launch picnic. The party was international: Chinese, Italians, French, Germans, Japanese, Swiss, Belgians, Danish, British, and Americans to the number of perhaps fifty. The purpose, a review and discussion of the silted condition of the river, which threatens to flood the adjacent country during the rainy season of July and August.

The country is so harassed with taxes, for the purposes of war, that funds for public benefit such as adequate river dredging are not available. There is a watermark on the first floor of our house made by the flood level a few years ago. Such a disaster means the destruction of villages where houses are made of adobe, the drowning of the winter food crop, and many deaths. Engineers are agreed that this river could be made a splendid entry from the sea, and a system of irrigation could be made which would refresh the crops during the long dry season.

The day was notable for me because I rediscovered Chang Ming-lee after a separation of eight years. She has given up portraiture, and found her motive in the revival of native arts and their application to modern Chinese use. With her private fortune she is

able to give occupation to craftsmen who have been idle since the fall of the throne. Many processes are carefully guarded family treasures, and in danger of loss unless used. She is having lacquer made again on linen foundation by the slow process which does not crack, as the modern imitation invariably does. She has just finished the interior decoration of a Chinese hotel in Tientsin and is busy with sketches for a café in Tsingtao, in addition to several private houses. She is not interested in export, but in Chinese use of what her workmen produce. Her particular flair has always been dress — on the river she wore a harmonious costume in shades of russet, brown, and gold. Mai-da tells me that her influence in the revival of the ancient Han costume is evident everywhere in smart Chinese circles.

I spent this morning idling about the Chinese city. I sat for a time in the workshop of a coppersmith who was hammering an elaborate design on a brazier, without pattern other than that in his head. It is restful to be back in this country where one need have no excuse for sitting beside a stranger other than the desire for companionship.

He told me that the city officials are praying for rain twice daily, at nine and at four, in the Temple of the Supreme God. The Commissioner of Civil Affairs leads the procession, followed by an official from every other department in the government; they start from the Chief Station of the Fire Brigade, and walk carrying burning tapers. They offer the god five dishes each of fruit and vegetables each time of prayer, burn paper petitions in the urn, and fall prostrate nine times before the image of the god, knocking the head on the floor three times in each kotow.

From the threatened famine he went on to the Dragon Festival, which falls

on the fourth of Sixth month, our count, and is one of the three dates each year when all Chinese accounts must be balanced, in accord with custom. He told me that times are very bad, the city filled with war refugees from Shantung and the Yangtze valley who can get no work and are dependent upon the charity of local laborers who are also in a precarious condition. The licorice-root trade, employing several thousand men, is closed down by exorbitant taxes; the carpet tax has stopped all the Chinese weavers and all but one foreign-owned establishment, putting eight thousand people out of work, while a tobacco tax is rumored which will make it impossible to continue business.

A little way along the street I met a young student who told me that local conditions were such that the people would welcome a change in government, and that the Nationalists could come in without bloodshed — if they could rid themselves of the Communists first.

In the Hall of Classics the attendant, who had just returned from a week's holiday at his native place, told me that the people of the interior have gone back to primitive man-power methods of transporting their goods, even where the railways are running, because of the frequency with which soldiers make off with engines and loaded cars. He said that the retreating Fengtien troops destroyed the railway tunnel south of the Yellow River and took away all the imported ironwork of the bridge. He is firm in his belief that a new prophet is to be given to China to revive the truths of Confucius, who taught men to live in peace and harmony. He declares that it is very foolish for the Christians to run away now, if they really have a message from a great prophet, as they claim. I pointed out that they had been badly treated and

certainly would suffer death in angry mobs if they remained in the interior. He only shook his head and said, 'The disciples of a great prophet do not fear physical death — only death of the spirit.'

I said that I was glad to know that he would stay in his place and admonish the mob, if it came, in the language of Confucius. But he answered, 'I should run away. I am only an attendant who sweeps the floor in times of peace.'

I enclose Anne's letter.

CANTON, *Fifth Month* 19, '27

DEAREST SISTER,

We went down to Hongkong on Fifth day and spent the week-end at Cheng-chow island. Great excitement coming back on the Lungshan Second-day morning! I was asleep when Robin dashed into the cabin, woke me, pulled off my rings, and pushed me down on the floor, whispering, 'We are fired on by the Whampoa Cadets.' I lay flat under the porthole listening to my watch tick off the minutes from seven until seven-twenty to the accompaniment of the whizz of bullets, punctuated by the thud when they struck. One went through the bathroom. When all was quiet we slipped out to investigate — a bullet went through the funnel; several were embedded in the deck, and three near portholes. Luckily most passengers were asleep and no one was hurt. The river passenger boats are now escorted by gunboats.

The Consuls consider it unsafe for us to live at the White Heron's Nest, so we have taken a flat on Shameen — the Nicklemans' flat. There is hardly ever a lighted house on Shameen after eleven. The Volunteers drill, drill, drill. Coolies no longer lounge and spit insolently on the front bund. The benches are clean and fit to sit on.

Canton City is quiet and almost unbelievably clean. There are still some antiforeign posters about, but the attitude of the people is friendly. There was much more 'hot air' and publicity about the anti-Red clean-up here than actual doing, but it had the desired effect of quietening the trouble-makers and giving the people confidence to come out of hiding and go on with trade. A number of really sensible Western-educated students are here and they have good modern ideas for sanitation and improvement — if peace continues. I go about the city quite unmolested.

Things look fairly prosperous in Chinese households, and even the people in the streets look well fed. The market is full of produce; prices are high, but wages have gone up, so the level is about the same. There is considerable furor about the disbandment of the 'strikers,' who wish the merchants to pour four millions into their headquarters' coffers to pay them off. In reality most of the workers went to work long ago and the names on the strikers' lists are idlers who never did work, so the merchants are not hustling to comply. They are too busy trying to recoup what they lost during the enforced curtailment of trade. The Chinese merchants are a fine lot of people and it is a shame the way they are harassed, worried, and taxed.

We have been up the West River, in a launch, for an all-day picnic, the first picnic trip up in two years. We went ashore and played tag with some country kids — they are fleet of foot and impossible to catch. I like the country people — they are so wholesome and have such a delicious primitive sense of what is a joke.

It is ten to twelve now and I must go swimming before lunch. We have a swimming gala on Sixth month

sixteenth, so I must get some diving practice. At present I am jolly rotten.

Dearest love to thee,

ANNE

TIENTSIN, *Sixth Month 18, 1927*

Our garden is a bower of roses. We have tea there and I have made friends, over the wall, with two Chinese children who live in the next place. They have pushed a garden table, on which to stand, up on their side. I often catch them peering at us, but they never 'come up' until all guests are gone — then they shyly accept gifts of little cakes.

The boy has twice worn a sailor costume, but the girl invariably has pink silk trousers and coat. They tell me that they have five mothers and one father. Father has gone to Dairen to find a house and they were to follow, but now the 'number one mother' will not move because she says it will be quite safe here, as the U. S. A. marines are coming to protect all the people.

Since then the marines have arrived and we have dined with General Castner, in charge of the American army in China, and met General Smedley Butler, commander of the marines.

We have also dined at the French, Belgian, and German Consulates this week, as well as been the guests of the Italian Consul to hear General Mobile, the Italian aviator, tell of his flight over the North Pole. At one dinner I sat next to the Chinese Commissioner of Foreign Affairs, who proved a charming light-hearted companion. He does not speak English and holds no brief for anything modern; he has 'forbidden' his wife to bob her hair. Mr. Tao, a young Chinese secretary of the Foreign Office, is popular everywhere. He is modern, with a wide smile and a chirpy manner. Last year when he was

sent to negotiate with the Japanese about the firing from the Taku forts on a Japanese gunboat, he swung into the office and said abruptly, 'I hate you — I hate you Japanese. You are always making me trouble. I was just off to the Western Hills for a holiday with my wife — you just stir up trouble to annoy me.' He is often at dinners at the Japanese Consulate and in private houses. Hostesses treasure him because he is sure to enliven the conversation.

Old customs and new jostle here. As I write, a Chinese wedding procession passes, a red-and-gold pageant with gayly dressed banner-bearers and musicians strumming instruments to which the bearers of the bride's canopied and sealed chair keep time. Two or three such processions pass weekly, and at the Café Riche, National Grand Hotel, Jazz Gardens, and the Olympic Roof the descendants of other ancient families can be seen every evening dancing modern steps to Western tunes. Not only young returned students, but silk-skirted rotund fathers are caught in the swirl of syncopation.

Modern electrical appliances are popular. Every tiny shop has electric light. Mai-da, who was married from a canopied chair, has an electric cooking stove, and the doors of her new garage, built to accommodate the Packard limousine her husband gave her for her birthday, are replicas of the doors of an English cathedral. When I failed to praise them, she pricked me with the information that they are no more sacrilegious than the use of an image of Kuan Yin as the base of a lamp, which her husband saw in a Philadelphia drawing-room.

Wellington Koo's family came down from Peking to their house on Race Course Road on the fifth. He is resigning from the government. Several Chinese officials have removed their

families from Peking recently, and on the eighth Marshal Chang Tso-lin issued a mandate forbidding such changes of residence, as it excites the mass of people. He sent to his house at Mukden for his fifth concubine, enlarged his staff of servants, and generally gave his residence permanency to offset the rumor that he holds himself in readiness for flight.

Rumors of an impending collapse of the Peking government have been in the mouths of street venders, fish sellers, hot-cake men, tea-house minstrels, and like purveyors of gossip to the illiterate public for two weeks. Substance was given to the rumor by the absence of General Sutton's ponies from the races, where they have formerly been favorites, the public sale of his motor cars, and his sudden departure from China, because of a disagreement, so the gossipers retail, over the pocketing by a Chinese general of funds meant for war purposes. General Sutton, a tall, daring adventurer, is a blond hero to the common people of the North. Since his departure the action of Generals Chang Chih-kung and Tien Wei-chin, who came north for conference and received arms and money to push the line southward, but turned face and joined the Southern cause when they reached the firing line, has increased alarm.

The people have lost faith in the paper money and wait day and night in the courtyard of the government bank here hoping to change their notes for silver. It is pitiful to see them.

The Nankai and Peiyang Universities closed early to permit their students to return home 'before trouble broke out,' and precipitated a sudden closing of all middle and lower schools, thus further tightening public tension.

Marshal Chang Tso-lin sent out a circular telegram a few days ago querying his generals and Tupan Yen

Hsi-shan, of Shansi, as to their opinion of the wisdom of his assuming a dictatorship to restore confidence. To-day he assumed office with much pomp and ceremony, without waiting for the opinions of those who did not answer promptly.

TIENTSIN, *Seventh Month 1, '27*

The thermometer registers 109 in the shade. The officials continue to walk through the dusty streets twice daily, carrying burning tapers, to the Temple of the Supreme God, to petition for rain.

Chinese friends caution Westerners against venturing away from the protection of their armies and gunboats, warning them that the voice of conservative China is gagged in all political councils; and at the same time they evince alarm that Westerners are closing their affairs and returning to their native lands by every steamer, and cry that this exodus will push progress back hundreds of years both materially and spiritually.

I have seen figures compiled by a young Chinese economist which show that the Chinese small farmer is migrating north in unprecedented numbers — and taking with him his chattels and his family. This man has returned from Manchuria, where he says the roads are filled with homestead seekers from Shantung and the Yangtze valley who sleep under the stars by night and trek by day, carrying their possessions as best they can. A large percentage of the women trudge on bound feet and have never been ten miles from home before. He reports a similar exodus from South China into the Philippines, Indo-China, and the Malay Peninsula. He shows that more than 900,000 Chinese have left their native land in the past four months.

Rumor is current that the coming election in the United States will make

politic the withdrawal of at least a number of the marines from China as a vote-securing measure.

Murmurs that the English taxpayer is not in favor of his country continuing to stand sponsor for and thereby incur the expense of policing those strips of land placed under her jurisdiction, as places of segregation for Westerners, and into which peoples of all nations, including Chinese, have crowded, have been given substance by the alacrity with which the British Concession at Hankow was relinquished and the readiness with which negotiations for the return of the Tientsin Concession were undertaken.

I wrote you last on the day Marshal Chang Tso-lin assumed office as Dictator. His first move was a declaration of adherence to the San Min principles, a statement of lifelong friendship with Dr. Sun Yat-sen, and the inauguration of a campaign to clear out Communism. Seventy-five students have been arrested for radicalism, suspected of distributing Soviet propaganda. The chief of police has pasted placards cautioning women and girls to appear in public in modest attire — bobbed hair is forbidden, sleeves and trousers must reach to wrist and ankle. Amah has just read with excitement the news that the police have arrested a girl to-day in Central Park who wore elbow sleeves.

The street sellers now confine their cries to the advertisement of their wares. A hot-cake man below my study window is shouting, 'Fresh-baked dough for henpecked husbands.' There has been no lessening in taxes, but there is a general lessening in apprehension on the part of the people. Dictator Chang Tso-lin has announced that he will use his salary to relieve the poor. Wu, the fan-maker, tells me that he has bought six months' supplies and is again employing his

full staff of workers. He is confident of six months of peace. He says the future beyond is 'a mirror with the face to the wall.'

The Chinese press is to-day filled with conjecture as to the next move of Tupan Yen Hsi-shan, of Shansi, who failed to respond to Marshal Chang Tso-lin's telegram of query regarding the wisdom of assuming the dictatorship. A man who has just come from Tianyuanfu says that delegates from Feng Yu-hsiang, Chiang Kai-shek, two American publicists attached to the Hankow government, and a representative from Chang Tso-lin are all at the Shansi hotel hoping each to influence him to throw his strength with his particular party. The blue-and-white flags of the South float peacefully with the five-barred flags of the North on the Shansi border, while the soldiers fraternize with each other and with the villagers.

I visited at the home of Yen Hsi-shan, in Shansi, seven years ago. He is a native of the province, born there in 1882, and attended college in Japan. He raised a local army and was a leader in the revolution of 1911, distinguishing himself by being the first general to propose the disbandment of troops to curtail expenses. He set an example by sending 30,000 of his men back to their farms and workshops. He has been tupan since 1916.

I remember thinking him very like many thrifty Quaker farmers we know. He had a solid, substantial appearance and carried himself with an unassuming self-respect. He talked principally of building barns, the breeding of draft horses, and the rotation of crops. He seemed to regret the presence of neighboring war lords who made necessary the maintenance of a standing army to protect his province, and had a project for the distribution of imported seed wheat to the farmers.

His household was old-fashioned, clean, and without display.

Seventh Month 22, '27

A Chinese friend has warned me against the use of names, even in letters. She gave me the sad instance of one of her relatives who wrote of conditions in his city and has died in prison for the offense. A member of the American consular service told me that they now employ naval couriers, in all territory under the Nationalists, because of the censorship.

I have seen a Chinese girl, one of the blithest members of the Kuomintang when I was in Canton, who has just come away from Hankow a broken nervous wreck. She says that all the young idealists followed the movement to Hankow, by special invitation. She worked at the designing of colored posters, as she had done in Canton, and was not much interested in the subject so long as she could use plenty of color. In the beginning she was happy, because she was young and able to use her talent and at the same time further a national cause. She liked to see her posters pasted on the walls and think of them spread through many villages. One day she was distressed by continued cries of pain and asked aloud what it could be. Her friend, who worked near her, stopped her queries by popping a hand over her mouth and making a funny joke. When they were in private she explained that she feared the cries were the screams of victims tortured in prison. Day after day the cries continued, and young Chinese men and women began to talk quietly among themselves. The rumor spread that the adviser Petroff, assisted by a pock-marked Chinese, Chien, had instituted a house of torture to force merchants to give up their money to the government.

A much-liked Chinese disappeared

and word leaked out that he had been dropped into the river with stones tied about him. Groups of idealists huddled together and discussed the situation. Young Chinese men formed a secret society to assassinate Mr. Borodin and free the Kuomintang from Russian influence. Foreigners were gone, and with them their restraining influence. A reign of terror set in. Coolies out of work roamed the streets, looting and behaving in frightening ways.

The girl became ill and friends got her away. She still believes that the right must eventually conquer, and young China must find her leadership among her own nationals — not turn again to advisers from another land.

General Nan Kuei-hsin arrived in Peking on Saturday afternoon to lay before Chang Tso-lin proposals from Tupan Yen Hsi-shan for a national truce between all Chinese military factions, to rid the country of Russian interference and Communism. The following day Ho Cheng, a personal friend of General Chiang Kai-shek, arrived and was closeted with them. At the end it was given out that a grave menace is 'eating at the stomach of China' and that all men must unite to exterminate it.

On Monday, General Sun Chuan-fang hurried up from Shantung and announced his opposition to a cessation of the Southern drive just when he has made arrangements to pay a quarter of a million dollars monthly to a 'White' Russian general for competent soldiers with whom to recapture Nanking and Shanghai. He cautioned Chang Tso-lin against trusting Chiang Kai-shek, who he says is in league with General Feng Yu-shiang, whose confederacy with the Russians was exposed by the documents seized in the raid in Peking. Dictator Chang has expressed himself as strongly against the buying of 'White' Russian soldiers, which can only complicate an already complicated situation.

In the meantime General Feng has been shouting, 'Down with the Reds!' Mr. Borodin and his party have gone into retirement at Kuling, and are living uninvited in the houses of Westerners.

The Chinese press is filled with the record of innumerable suicides, who leave statements that they die because of sorrow for their country.

The Lama priests have begun a sixty-day period of prayer to Heaven for peace.

THE CONTRIBUTORS' CLUB

ANSWER ONE TO TEN

I AM an introvert. I am not altogether sure that it is wise for me to publish the fact; perhaps it would be as well to keep it within the family circle. It sounds as if it were a condition demanding six months' rest and the ministrations of a trained psychiatrist. But I have been reading up the subject, and I find that it is really nothing to be ashamed of. I find that some quite eminent persons have also been introverts. It appears that we must all of us be either introverts, extroverts, or ambiverts, and there is apparently little to choose. An ambivert would seem to be a rather characterless individual, neither one thing nor the other. An introvert is slightly more intellectual than an extrovert, but an extrovert usually makes more money. On the whole, I am quite content to be an introvert.

I did not know until yesterday that I was an introvert. In fact, I did not know that I had to be any one of the three. I found out my condition by means of what the psychologist terms an emotional hygiene test. I found it out by placing forty-eight crosses in carefully thought-out positions, by translating, with the aid of an ingenious table, the crosses into yes's and no's, and finally by adding the resultant affirmatives. Since I had twenty yes's to my credit, and since I am a female, I am an introvert.

I answered the questions very slowly and carefully; 'with thought,' as the directions bade. I did not look ahead to see to what my answers were committing me; I tried to answer with

the utmost honesty. It was a difficult test.

Each of the forty-eight questions had to be answered by placing a cross against a number from one to ten inclusive. The first question read: 'How steadily have you worked at the ordinary task of the day? Answer one to ten.' I considered carefully and finally gave myself a rating of five. I went on: 'How well have you remembered most of the errands and details of your daily routine? Answer one to ten.' I was just about to put a large cross under ten when conscience whispered, 'Ought you to call it remembering when you write everything down?' and added, 'What about your blue silk umbrella?' and I put a small cross under four. 'How have you acted and felt at social affairs? Answer one to ten.' But 'acted' and 'felt' are two different things. And just what do you mean by social affairs? 'How high a value have you placed on yourself and your abilities?' Oh, come, that's hardly fair. 'Do you like to argue?' That's an easy one. 'How have you met the obligations of your conscience?' Answer 'with thought.' 'Do you make friends with the opposite sex? Answer one to ten.' And so on for forty-eight questions.

The psychologist has the most abiding faith in the inherent value of questions and answers. He has the most touching confidence in the infallibility of figures. And if he can translate answers into figures, and especially if he can then translate the figures into graphs, he feels himself competent to compute and weigh the imponderable, to measure the immeasurable, almost

to unscrew the inscrutable. He remembers that in the days of his childhood he was told that 'figures don't lie,' but he forgets that he was also told that 'you cannot add apples and pears.' The psychologist knows that figures don't lie. He has found a way to add apples and pears. He not only adds apples and pears, but he adds plums as well, and he divides the result by cherries and he produces his final answer in terms of tomatoes. In that emotional hygiene test the psychologist adds physical facts and mental states, and he brings out an answer in terms of occupations. For that emotional hygiene test is an aptitude test. The answers to those forty-eight questions tell you whether or not you are properly fitted to your job. An introvert, it appears, needs one type of job; an extrovert, another; an ambivert, a third.

And I am an introvert. For I am a female, and I have twenty yes's to my credit. For some strange reason, a male needs but fifteen yes's to be an introvert. In my case the decision was close. Had I but nineteen yes's to my credit, I, being still a female, should be an ambivert. How much depends on how little! My fitness for my position, my happiness in my life's work, all dependent upon the answer to one single question! Now I answered those questions thoughtfully and honestly. It may, however, be wise for me to go over them again. I may find that there was room for reasonable doubt. 'Do you keep a diary?' Since the answer was no, I allowed myself but one on that. But I *used* to keep a diary. I kept a diary for five consecutive years once. They were formative years, too; and five years is a long time. Ought I not to give myself some credit for that? Suppose I change that cross from one to three. Then my conscience bothers me a bit about question number thirty-one:

'How have you been at selling things? Answer one to ten.' Yesterday I rated myself seven on that, though I could n't remember that I'd ever sold much of anything except tickets to church suppers. I gave myself that seven because I remembered the reputation I once acquired of being the only person in town who'd ever thought of selling tickets to a sleigh ride. Since that action turned our customary deficit into a substantial balance, I felt that I had, along the line of salesmanship, latent ability which ought to be recognized. So I put my cross under seven. I feel a little guilty about that; perhaps the estimate was too generous. A careful revision of that questionnaire may show that I am not an introvert after all.

Of course I should have seen that questionnaire years ago. It is rather late now. When one is already trained and established in a job, it is not wise to begin wondering whether or not it is the right job, whether or not one would be happier or more successful somewhere else. And yet, that emotional hygiene test sets me to thinking. I am sure that five years ago I should not have answered those forty-eight questions as I answered them yesterday. If my job fitted me then, does it fit me now? And five years from now? Who can say? Aptitude is only a combination of inherited factors acted upon by environment. Environment is a shifting thing. And the centre of one's interests surely changes with the years. Will the job I chose at twenty be the job I shall have the most aptitude for at forty? Can a man always choose wisely for his future? Must he content himself with being at times a square peg? Shall he change his job every few years? Such questions as these challenge thought.

The psychologist assumes that all questions can be answered either

categorically, by yes and no, or numerically, by one to ten. He allows no counterquestions; he admits neither 'if' nor 'but.' He makes no allowance for 'that depends' or 'other things being equal.' But in life, if not in questionnaires, much does depend, and other things seldom are equal. Take that first question, for instance. 'How steadily have you worked at the ordinary task of the day?' How very, very largely the answer depends (1) on the task, (2) on the day! 'Do you prefer to work alone or with others?' How can one generalize? The honest answer here is 'It depends (1) on the work, (2) on the others.' 'How have your likes for things intellectual and things athletic compared?' Again, it depends. It depends upon the mood; it depends upon the weather. It depends upon the answers to other questions: 'Who's going?' and 'What's the book?' The answer cannot be three or five or seven. The answer to that question depends upon circumstances which, psychologists to the contrary notwithstanding, are very rarely equal.

Next month, when I shall have forgotten just where I put those forty-eight crosses, I shall try that test again. And I may find that I am not an introvert, after all.

DISCOVERING THE GREAT ADAIR

I MET the man who told me this story on a Great Lakes liner en route from Detroit to Buffalo. A liner called, with true Middle Western modesty, a boat. We sat on deck in the cool of an autumn evening, talking crops, animals, fertilizers, and men in relation thereto, while the shore lights faded and the moon touched the wavelets of Erie as pleasantly as she does those of Como.

I've been judging wool sheep (said he) at the Michigan State Fair; that's

why I'm so far from home. But day after to-morrow I'll be on the hills again with my pets. That's the best part of life to me. Take a clear day in April and I can get more fun out of lambing ewes than a millionaire can get out of a yacht. Trudge home at night so tired I can hardly lift my feet, yet contented with everything. It gives me what the preachers call the peace 'which passeth all understanding.'

The judge of mutton sheep out there was old William Adair; maybe you've heard of him. I've known the Adairs from boyhood on; they're from our state, and we often met up with them at fairs and stock shows. Then I roomed with Charlie Adair at agricultural college. Occasionally he'd take me home with him for a visit. A grand family, the Adairs — eight children, four of them still at home and the others settled in the neighborhood.

When Charlie and I finished college we accepted what looked like a big chance to get into farm-bureau work in adjoining counties in Ohio. Later on we switched to a farmers' coöperative at more money. Selling coöperation to the American farmer is a real job; it means talking, pleading, bullying, organizing, writing, and getting your name into the papers as often as possible. In two years I'd had enough of that, and quit to go back sheep-raising, sheep being easier to handle than men and more appreciative. But Charlie hung on and made his way bit by bit to a responsible position in the coöperative movement. At thirty-five he was one of its big men, drawing twelve thousand dollars a year up in Minnesota. Then he died — burned out. When I saw Charlie in his coffin — worn thin and bald — you can figure I was glad I had gone back to sheep in time.

The Adairs took his death hard. Charlie had been too busy to get home

often, but they had followed his upward march with pride every step of the way. He would have been surprised to know how frequently he was quoted and his opinions deferred to in the daily routine of the farm. 'Charlie always said this.' 'Charlie would do that this way.' 'I allow Charlie would cross these critters and send those to market.'

After Charlie died — burned out, as I say — the old man and the boys seemed to fall more and more under the influence of his memory. Their regard was deep and real, all right, but a little unhealthy at that. I never went there without hearing Old Bill say, with a shake of his noble gray head, 'Well, Charlie was the man of the family. We lost the great Adair when Charlie died.' The other boys, too, harped on that string too much for their own good; it kept them thinking they never would amount to much. 'We're just plodders,' Young Bill said to me once; 'but Charlie had ideas. He was the man of our family, all right.'

Young Bill — he's always been called that, though he is nearing fifty now — had his wool sheep at this fair where his father was judging muttons, so I've just been seeing a good deal of them both. Their talk was all of Charlie even yet. Old Bill, after drawing me out on my comradeship with Charlie at school and work, would end each conversation on the same melancholy note: 'Well, Charlie was a man. Even as a boy he was a man. We lost the great Adair when we lost Charlie.' And Young Bill would echo Old Bill — Charlie, Charlie, Charlie.

Old Bill and I judged in relays; I'd take the wools for an hour and then he'd take the muttons. Leaving the ring one day, I stopped by Young Bill's pens, which, as usual wherever the Adairs showed, were plentifully decorated with the ribbons announcing victory in this or that class.

'Bill,' I said, 'I notice that the famous Adair merinos seem to be holding their own, in spite of the fact that I'm leaning over backward agin' you to give the other fellows a square deal. What you've won is on strict merit, for I've been downright careful to avoid criticism on the ground of old friendship. This is my first job of judging in the Middle West, and I'm taking no chances. But you've got the blood lines, and the condition is close to prime.'

Bill looked pleased for a moment; then habit conquered him. 'Why,' he replied, 'they're fair enough, but nothing to what they would be if Charlie could have lived and taken a squint at them now and then. There was a man with an eye for a sheep — for everything, in fact. Just went out and made good every minute. That was Charlie wherever you put him. He was the great Adair, all right.'

I boiled over at that. 'Bunkum,' said I. 'Your sheep could n't be in much better shape, and if Charlie had been tending 'em they would probably be in worse. Listen to me, Bill, and listen hard. You're overdoing this Charlie business. It's all right up to a certain point; but you folks have passed that point. I knew Charlie better after he left home than any of you did, and I tell you he never knew a quarter as much about sheep as you do to-day. He knew how to dictate letters, and make speeches, and solicit money, and get laws passed, and drive people hither and yon — but his sheep knowledge had pretty much oozed out of him. So why give credit to Charlie for the good points of a flock founded before he was born, all the while taking the blame yourself for its bad points, which are mighty few? You're humbling yourself out of all proportion; I don't like it and neither would Charlie.'

'What's more,' I said, warming up to the subject, 'you're always setting Charlie up as the great Adair. Charlie was O. K., no doubt of that; but, if you really want to see the great Adair, come here and I'll show him to you.' With that I whisked Young Bill out of the barn door and pointed toward the show ring. 'There,' I said, 'right there in the centre of that ring stands the great Adair. Take a good long look at him.'

I suppose I have an aggravated case of what the sociologists call the rural mind; but to me that morning William Adair, Sr., standing in the sunshine like a patriarch of old, firm as a rock on his seventy-eight-year-old legs, seemed the exact image of what God intends a man to be toward the end of the experience we call life. There was fire in his eye and snap in his voice as he questioned the exhibitors; when he bent over to feel out a ewe you could see his heavy back-and-shoulder muscles quarrel with his shirt; his touch was as sure and tender as ever, the touch of love an animal instantly quiets under.

A practised eye could see all that; but this rural mind of mine saw a good deal more. It took in all the vast good that rugged veteran had done in his many years — all the life, literally multitudes of lives, he had brought forth and nurtured, all the lambs he had tended and saved in foul weather, all the human backs he had clothed and the hungers he had fed, all the toil he had done and the glory he had won without thought of praise or expectation of great reward.

What drove him day by day — duty or love? I say love.

'There,' I said over and over to his son in as many ways as I could think of, 'there's the great Adair. There's a greater man than Charlie would have been at the same age; maybe a greater man at any age, in the sight of God and eternity, than Charlie ever was or ever could be. There's Man practically as he would have been through all history if Adam and Eve had never sinned in the Garden of Eden. And the best thing about him is that he does n't even suspect he's a great man. Now, Bill, I've done some thinking on this theme, and I tell you flat that nothing under heaven can keep you from being the great Adair in your turn if you quit writing yourself down as a loss and brace up to your opportunity. Ours is the greatest life in the world, and don't you forget it.'

The great Adair looked at his watch, dismissed the exhibitors with a lordly sweep of the hand, tugged on his coat, and strode majestically toward us. As he came he wiped the sweat from his broad brow with a gay bandanna; it crossed my mind that, saving Sundays and holidays, Old Bill had enjoyed the luxury of a hearty, life-preserving sweat every day since his babyhood.

'Your turn,' he said to me. 'I was just thinking that Charlie could have done single-handed the work it takes both of us to do. He always was the best man of our family.'

I lingered a minute, waiting for Young Bill to speak. When he did n't do so, I gave the old man a slap on the shoulder and said, 'There's two opinions about that,' and went away. After all, when you find a great man, the way to keep him great is not to put any disturbing notions into his head.

THE CONTRIBUTORS' COLUMN

WOMEN'S colleges are nearing a crisis. They must attain equality with the colleges for men or be condemned to permanent inferiority. So serious are the facts, so pressing the situation, that the heads of the seven most famous women's colleges in the country make in the *Atlantic* a combined appeal to thinking men and women. **James Truslow Adams** is a ceaseless traveler, a student of history, and the author of a standard work on New England. He thinks his own thoughts and speaks out loud. ¶At the risk of a superlative, and in full cognizance of our partiality, we venture to say that the present story of **Margaret Prescott Montague** is one of her very best — a peer to her prize-winning 'England to America.' Miss Montague writes that she has been flying daily this summer, but only vicariously, and, as it were, on the wings of the morning newspaper. **Williams Haynes** tells us that silk is cotton, furs are cat, wool, shoddy, pearls, synthetic — and, as a prominent New York chemist, he ought to know. ¶For more than eleven years **Lieutenant Commander Bruce G. Leighton** has been actively engaged in flying. A member of the Bureau of Aeronautics at Washington, he has also been closely associated with aeronautical engineering development. We have not seen elsewhere so informal or so sagacious a discussion. **Mark Barr**, who is at present acting in an advisory capacity with the Harvard Business School, had the good fortune to take a trip with **William Beebe**.

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The status of Christian Missions is under question to-day, not only in China, but in India, Persia, and Turkey. **Dr. R. C. Hutchison**, Dean of the American College of Teheran, faces the problem of proselytism and frankly gives us the opinion of a worker in the field. **Humbert Wolfe** is an English poet who has found steady satisfaction in civil service. Between poems, as

it were, he is Principal Assistant Secretary in the Ministry of Labor. Incidentally, his latest volume is reviewed in this number. ¶Those who are about to die should salute **Raymond Edwards Huntington**, who gives generously of his counsel as one of the leading tax experts in New England. ¶The countryside is an open and delightful book to **Henry Williamson**, a young Englishman who is carrying on the tradition of Jefferies and **W. H. Hudson**. ¶**Joseph Husband** is the author of *Americans by Adoption*, and a series of studies of the industries of the country.

* * *

Virginia Woolf, perhaps the most accomplished woman novelist of to-day, pays tribute to the genius of her countryman, **E. M. Forster**. **Amy S. Jennings** has had several years' practical experience on the Hollywood 'lots.' **Morris Gray, Jr.**, made himself welcome with his first story, 'Off His Beat,' which appeared in the *Atlantic* for August 1926. ¶The *Atlantic* is nothing new to **Roderick Morison**. On a Cunard liner he crosses it every month as the editor in charge of the wireless edition of the *Daily Mail*. ¶Few men living know more about the Mississippi than **Arthur E. Morgan**, President of Antioch College. In earlier days he made raft trips on the river (as recounted in his diaries, *My World* and *Finding His World*) and for many years he has given intensive study to the major problem of its control. The engineering company of which he is the head has planned and supervised the building of levees on tributaries of the Mississippi in the flooded region, all of which are still holding, and has engineered about two thousand miles of drainage canals in the same district, as well. Men think of him as the president of a pioneer college, but when Dayton was overtaken by disaster in the flood of 1913 it was to Mr. Morgan that the helm was given. In the course of his career

he has had an active hand in the planning and construction of seventy-five water-control projects. Here is an authority to be consulted.

* * *

Francis Bowes Sayre is Professor of Comparative Law at the Harvard Law School. Granted a leave of absence in 1923-24, Professor Sayre served as adviser in foreign affairs to the Siamese Government, and both there and in Europe was called on to make such a single-handed fight for Siamese sovereignty as has no counterpart in modern diplomacy. ¶Writer and economist, Arthur Pound lived for many years in the Middle West, where his book, *The Iron Man in Industry*, took shape. Nora Waln, an American by birth, and the wife of an English Civil Servant, has been at her husband's side through all the late turbulence in China.

* * *

The real story of insurance.

HARTFORD, CONN.

DEAR ATLANTIC, —

We life-insurance men are certainly indebted to the *Atlantic* and to Mr. Calkins for a view of ourselves as the advertising man sees us, and he sees us as a poor customer. We learn that 'no important industry is so archaic, so remote from modern life,' that we do not insure our own business 'against the destructive power of silence,' and that we 'have no right to withhold from the public the real story of insurance.' As Mr. Calkins correctly states, the advisability of advertising has been brought before the insurance companies frequently. We have had it talked to us day in and day out for twenty-five years, and I would like the privilege of shyly stating a few of the considerations which have deterred at least one insurance company from entering into a general advertising campaign.

Mr. Calkins's theory, if I correctly understand it, is that if we spent enough money on what he calls advertising we could spend less on other forms of what I call advertising, and that the result on the whole would be beneficial.

I am reminded of a story that was told me some years ago of an effort which was made in a certain city by some of the leading citizens to raise a guarantee fund which would enable them to procure the services of a high-grade orchestra. There were business men of various branches on the committee, and each man was given his own branch to canvass in any way he saw fit. When the committee met, the general reports indicated

a response in the neighborhood of five per cent of those who had been called upon to help. There was, however, one tailor who reported that out of seventy prospects he had secured sixty-seven, and they asked him if they might see the letter that he wrote. He looked at them in some surprise and stated, 'I called on every man once, and those that I did n't get the first time I called on a second time, and those that I did n't get the second time I called on a third time, and the three men I did n't get are going to receive another call from me.'

Of course that was n't advertising, because advertising, as I take it from Mr. Calkins, is only in the printed word put in the pages of a periodical, or possibly on unsightly billboards. I don't know just what to call what the tailor did, but, in spite of Mr. Calkins, I suspect it was advertising. Certainly his prospects did not suffer from 'the destructive power of silence.'

Now, without disputing the great advantages there are to some kinds of business in mass production (and a certain amount of mass production, of course, is necessary in insurance), I can hardly see that insurance companies would benefit in the same way by growth that an automobile factory might benefit.

Upon what does the cost of life insurance depend? First of all, upon the mortality table. The mortality table is the same for a hundred thousand as it is for a million lives. The same proportion are going to die this year and next year and the year after. The second thing to consider is the rate of interest to be received this year and for years to come on the funds in the possession of the insurance company. It is certainly no easier to keep a billion dollars invested safely at a remunerative rate of interest than it is to keep ten millions. In fact, it is not as easy, and, speaking generally, the smaller companies have had in the past on the whole a higher rate of interest returns than the larger ones. Thus we are brought down to the expense of selling as the only place where advertising might make a difference in the cost if we, for the purposes of the argument, assume that the home offices and the expenses thereof are being reasonably economically handled.

I do not think that any insurance man would take issue with Mr. Calkins on the theory that it would be easier for the agent to sell insurance if in some way the mind of the public could be made more receptive to the insurance idea. His article virtually admits that we could not sell insurance direct by advertising. This has been tried in the past, and I do not think I am in error in stating that it has not been found to be an inexpensive way of selling insurance, or a method by which large amounts of insurance could be sold. People stand in line to buy

postage stamps or railroad tickets because they have got to have a postage stamp or a railroad ticket. It is not habit, as Mr. Calkins says. It is necessity, and they have got to have it now. If we persuaded them through advertising that they would have to have insurance, they would n't have to have it now. They would have to have it at a more convenient season. Insurance is, as he says, an intangible, an idea, a service. There is never a time, except when it is too late, when you can't do without an intangible. Insurance makes a high appeal — that is, an appeal toward providing for the future of yourself and your family. But the average young man is much more confident than the circumstances warrant of the continuance of his health and strength and ability to earn money.

We have a great deal of printed matter over which infinite pains has been taken to make it readable, attractive, human — in other words, to make it tell the story of insurance as Mr. Calkins would have it told. We have newspaper advertisements which we furnish to our agents, and which, when conditions seem favorable, we encourage them to use and to pay for; and we believe in advertising, but we have got to put our advertising where we think it will bring the greatest returns per dollar spent, and it would be suicidal, not only legally but actually, for us to embark on any great campaign of national advertising, because it would in our case raise and not lower the price of insurance. And if we charge more for insurance than other people do, we are lost. So we have got to advertise in a way that will really come home to the average young man, and the way we do it is sometimes by sending him printed matter through the mails and following it up by a call from a man who can tell him about insurance, and who can fit him with insurance, and do it now. Unlike Mr. Calkins's company, we try to keep, as well as we may be able to, the human touch with this young man after he has taken insurance with us. We do send him a little advertising matter with the notices of his premium due. We do try to be polite. We do congratulate him when he has made his last payment, and, incidentally, try to sell him some more insurance at this time. We do try to get him, through our agents, to tell us of more men who he thinks might be interested in insurance. We believe that this is the way to sell insurance.

We are not in a conspiracy of silence. In fact, it has sometimes seemed to me that we were in a conspiracy of talk; only our talk does not happen to be through the particular channels which interest Mr. Calkins, but it is a great deal more effective, and, to the best of my knowledge and belief, it costs less in the end than it would if we followed Mr. Calkins's notions. There

is n't any body of men who are more interested in furnishing widely the product which they have for sale and in furnishing it at the lowest possible price than the life-insurance men. There is n't any body of men who are more enthusiastic about what they are selling, to whom the human part of it is more appealing. I don't know a single life-insurance man who is not enthusiastic over his calling, not because of the statistics, and the algebra, and the calculus, and the adding machines, and the Hollerith machines that he uses, but because it is filling a real need, because it is something that helps the civilized world to keep together, something without which it would n't keep together. We want to sell insurance largely and cheaply more than Mr. Calkins wants to have us. We are investigating all the time with the one idea in our minds of doing our business more economically and efficiently. We are not any different from Mr. Calkins, or from the automobile manufacturers, or from any other class of business men, but it just happens that his kind of advertising is expensive for most insurance companies, and so we do not use very much of it.

Very truly yours,

R. W. HUNTINGTON

President, Connecticut General Life Insurance Co.

* * *

Friends of Hilda Rose, the last installment of whose letters appeared in the September *Atlantic*, will be interested in this cheery letter from our northernmost contributor.

FORT VERMILION, ALBERTA

DEAR ATLANTIC, —

Have just received your good letter and check. We will get through the coming winter in good shape. The check finished up what was still needed for the grubstake. That means food ahead for one year. I wish everybody in the world could say the same.

I counted the years that are left if I live to be seventy, and find there are twenty-two. I wonder how many hopes will come true in these precious years. Daddy reached the Promised Land — that dream came true. Brain food — the pile of books in the corner of the cabin. Friends — a box full of letters to read over this winter.

Daddy's favorite song used to be 'There's a long, long trail awinding, To the land of my dreams.' Here is the song he sings now, to the tune of 'Where the River Shannon Flows': —

There's a river that is flowing
Up to the northern sea.
'T is not famed in song nor story,
But it has a charm for me.

It has brought me from the Southland
Where the Starry Banner blows,
And I've settled down forever
Where the great Peace River flows.

I've a little moss-chinked cabin
Just by the northern shore,
Where I hope to live contented
Till the span of life is o'er.
May life's cares pass lightly o'er me,
Its troubles and its woes
Be to me a fleeting shadow,
Where the great Peace River flows.

How contented and happy he is. It's no wonder. Every seed he puts in the ground grows. It may be a long time before you get this letter. May I send a Christmas message to your readers?

If you leave the concrete highways
And go in the lanes and byways,
You'll find many Hilda Roses
Digging spuds and picking posies.

Thank you for your kind wishes and sympathy. It gives me a happy feeling, and the winter won't seem so cold nor long.

Faithfully yours,
HILDA ROSE

* * *

In the words of Bairnsfather, 'Well, if you knows of a better 'ole, go to it!'

FRESNO, CALIFORNIA

DEAR ATLANTIC, —

It is interesting to note that your glutton for punishment, Hilda Rose, has gone into new pastures where the hardships are really abounding.

If, however, she finds the life up there too soft, I might suggest a new line of endeavor — growing table grapes for the Eastern market in Fresno County, California. Here she will find a rich field, beset with all the hardships and disappointments to satisfy the most exacting readers of the *Atlantic Monthly* — intense heat, bitter toil, harassing labor troubles, scarcity of water, no remuneration, and plenty of wolves in the form of fresh-fruit dealers.

Sincerely,
HAZEL FARMER STITT

* * *

A friendly reader draws our attention to an omission in Willis Sharp's much discussed paper which we are glad to correct.

LA JOLLA, CALIFORNIA

DEAR ATLANTIC, —

I desire to express my very great appreciation of Mr. Sharp's article in the August *Atlantic*

entitled 'President and Press.' He presents a much-needed rebuke both of the attitude of the President and the newspapers. It is a public service of great value in a period when, as a result of the war and prosperity, the value of criticism and opposition seems to have almost ceased to be recognized.

The statement of the attitude of the press is, though, too broad. The Scripps Howard newspapers have taken issue with the President's attitude. I feel quite sure that you will find much the same view that Mr. Sharp expressed appearing in the *Cleveland Press*, *Denver Evening News* or *Rocky Mountain News*, *San Francisco News*, and other Scripps Howard newspapers. In fact, my understanding is that the President's address before the United Press Association last April was because of the critical attitude that the United Press and the Scripps Howard newspapers had taken toward the Administration's course in Nicaragua and Mexico. I am sure you will find in the Scripps Howard newspapers a protest against the President's view as expressed in that address, as well as his attitude on previous occasions.

I thought you would be glad to have your attention called to the unintentional error which you made in dealing with the attitude of the press.

* * * J. C. HARPER

How many of our contemporary readers remember the name of Robert Bonner, famous in the days of our youth? The *New York Ledger*, 'devoted to choice literature, romance, the news, and commerce,' paid handsomely in its day for Mr. Bonner's racing stable. He had a way with him, did Mr. Bonner, in all public utterances. We recall an advertisement placing his estate on Long Island for sale. It began, in display type,

IN THE HEART OF THE MALARIAL DISTRICT

A sale (advertisers please notice) promptly followed.

A friend now sends us a copy of the *Ledger* for March 15, 1862, from which we extract the following kindly notice of the *Atlantic Monthly* of that day: —

THE ATLANTIC MONTHLY, a magazine which has been published for some time with varying fortunes, is attempting to increase its circulation, and has, as we perceive by an evening paper, advertised a single article by one of the numerous list of distinguished contributors to the

LEDGER; though most of our writers never send anything to other publications. We should be glad to see the magazine literature of the country in a more flourishing condition. Our good wishes, however, or those of anybody else, will do it no good. The only way to obtain success is to deserve it. The active, vigorous mind of our people requires more substance and greater variety. People soon sicken of the same dish, even at the breakfast-table; though it be successively boiled, broiled, roasted, fried, stewed, hashed and re-hashed, with all the artistic skill of a French cook. The secret of the LEDGER's prosperity is, that we avail ourselves of all the highest talent which money can command; (besides keeping the fastest horses in the country.) — Read the article by Dr. Windship, 'the strong man of Boston,' who, the other day, lifted upwards of two thousand pounds, Avoirdupois, and expects to lift three thousand before he gets through writing for the LEDGER.

* * *

'Something in the Eye,' in the Contributors' Club for August, has reminded this disillusioned patient of a treatment which she believes to be far too common.

Briefly, one of my experiences was with a skin specialist of St. Louis, to whom I went for treatment of my hands. This same specialist had treated a sister before me for some time. When I reached his office I sat in the waiting room quite a while; then a stenographer entered by one of the three doors in this room and took my name, address, and so forth, and left the room. I sat a while longer and then another door opened and my name was called and I was ushered into a small treatment room, where I sat another while. The physician came, looked at my hands, asked two questions, then handed me a diet list and a prescription. He had given me not the slightest word as to my trouble or even the slightest information, and, feeling I should know what I came for, I asked him a few questions, but got only very brief replies. Next I was told to go into another room for a treatment of the hands and I assumed it was X-ray, but do not know for certain. As I was leaving this room I inquired of the first stenographer I had seen what the charges would be, and she pertly replied, 'You'll get a statement at the end of the month.' I said, 'Well, I want to know now.' She advised that I could speak with the doctor again if I wished, so I did and was told after a little wait that if I was a wage earner the charge would be 'three and five.' This ended my call on this specialist, and I left his office feeling I never wanted to seek his services again.

AMALIA KRUMREICH

When the cat's away —

SOUTH LYME, CONN.

DEAR ATLANTIC, —

Not long ago I was looking over some back numbers of the *Atlantic* prior to disposing of them; being in a hurry, I stacked them on the floor of a closet. A few days later I went to get them and discovered small pieces of several of the leading articles strewn about the floor. Peering closely, I found on top of the pile of *Atlantics* a small mouse, flat on his back, his toes turned up to heaven — quite dead.

Too much thought for food?

MARGARET DE R. LITTLE

* * *

And some of them can speak English.

HARTFORD, CONN.

DEAR ATLANTIC, —

Are typewriters people? When my little Rem (Remington Portable), first came to me, it was like adopting a baby. He weighed just eleven pounds, he had to have his little mat to play on, he must be carefully covered, he needed new ribbons, he came down with childish disorders. It used to seem to me sometimes that he needed everything but a bottle and a gocart — as it was, I carried him. He has been doing very badly lately, and yesterday he grew worse and worse, so there was nothing for it but to telephone to the Service Office. In an hour or two an automobile drew up, and a young man, with a bag, stepped out and walked briskly to my door. I introduced the patient, described the symptoms, and hung around with all the solicitude of a mother, while the young M.D. (M. can stand for mechanics as well as medicine) poked and prodded, just as it has been done to me a hundred times. Then he did something, somewhere, and the little invalid was a cure. But what made it all so human was that, when I asked anxiously, 'What was the trouble?' (I think I said 'Doctor') he looked grave and said, 'It was the lever.'

ALICE GRAY TRUSLOW

* * *

You can put your money — or your feet — on them any time.

Not long ago, writes a correspondent, there was a lady in Boston whose job it was in part to drive about town in a Ford car. A friend one day noticed on the floor a stout bundle of *Atlantics* tied with a string, and asked what it was for. 'Well,' the lady said, 'you see I'm rather short and they make a good foot rest. I used to take any kind of magazines, but they were always stolen, in garages and even on the streets, so I tried the *Atlantics* and they have n't been touched. I've used these for more than a year!'